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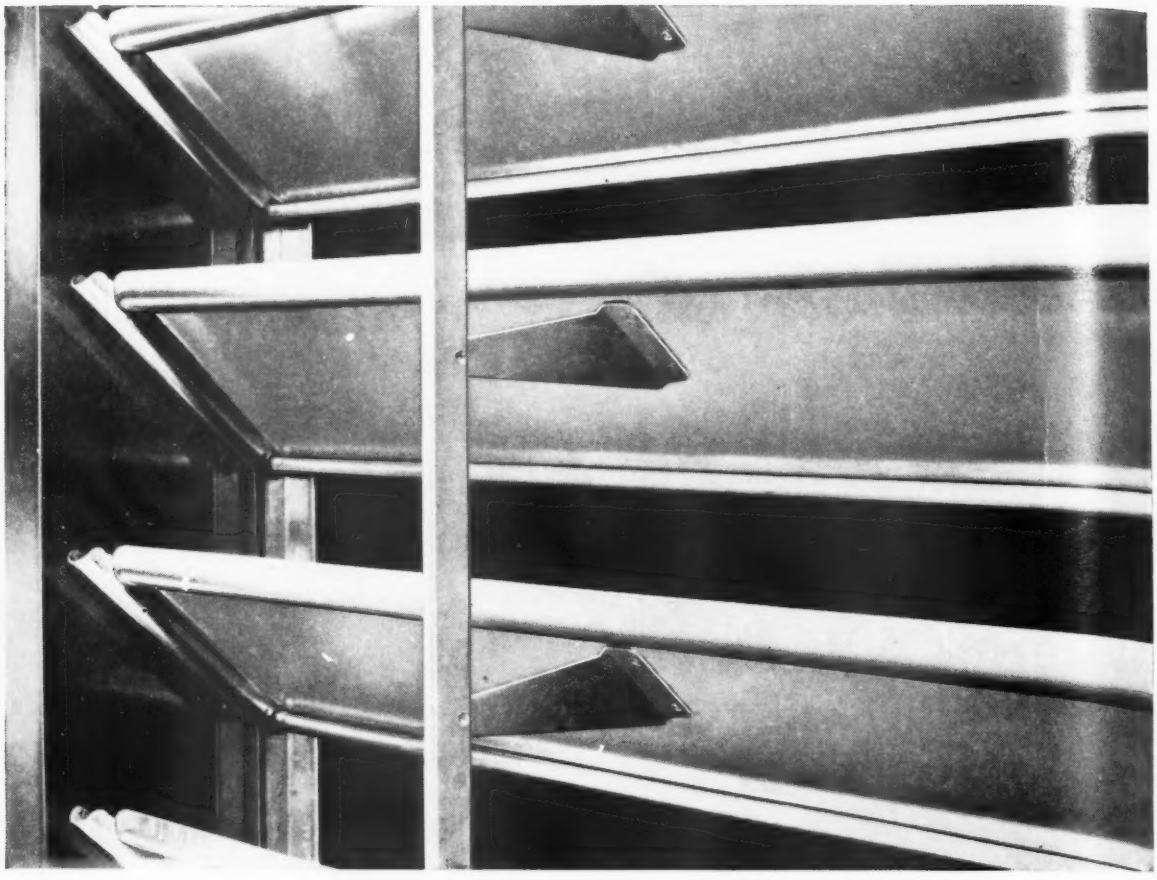

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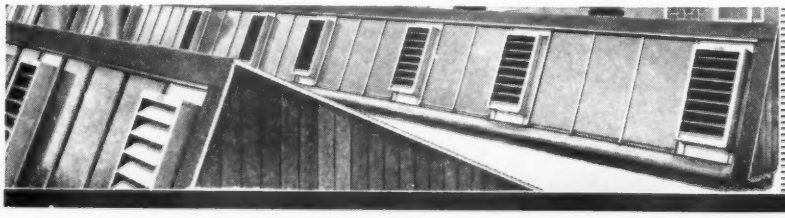

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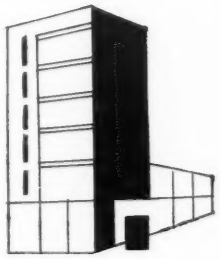

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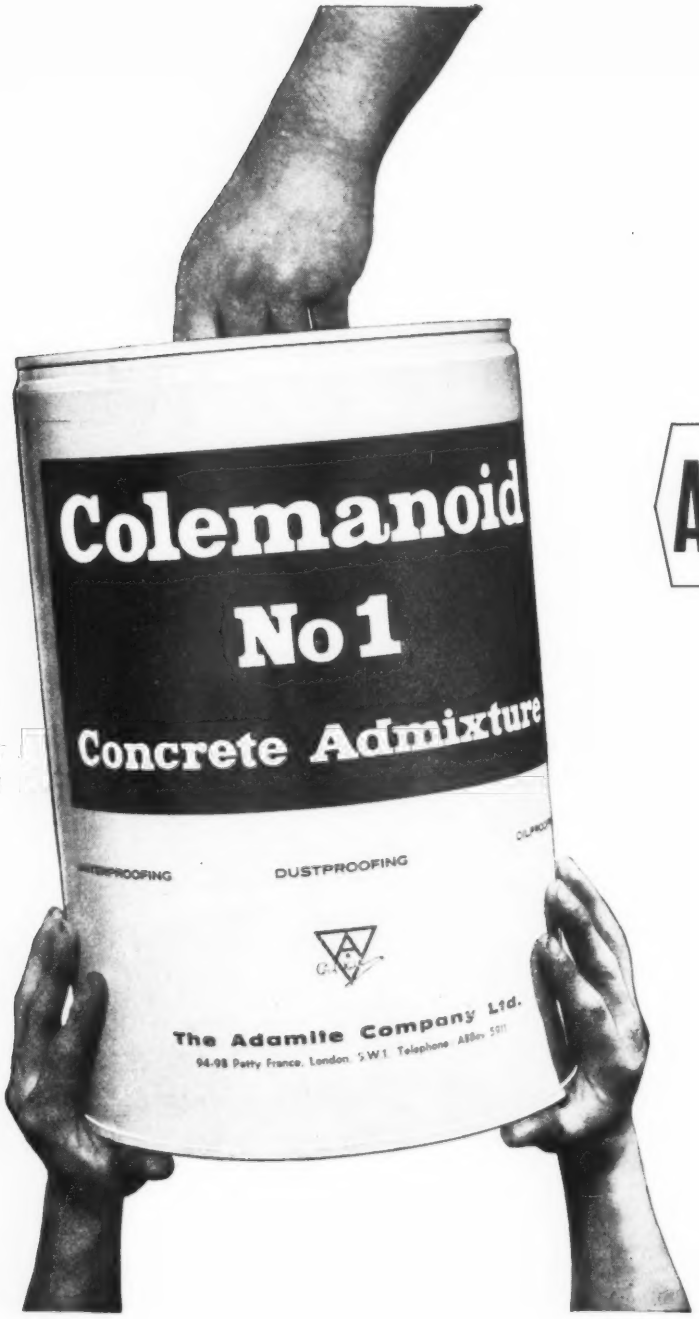

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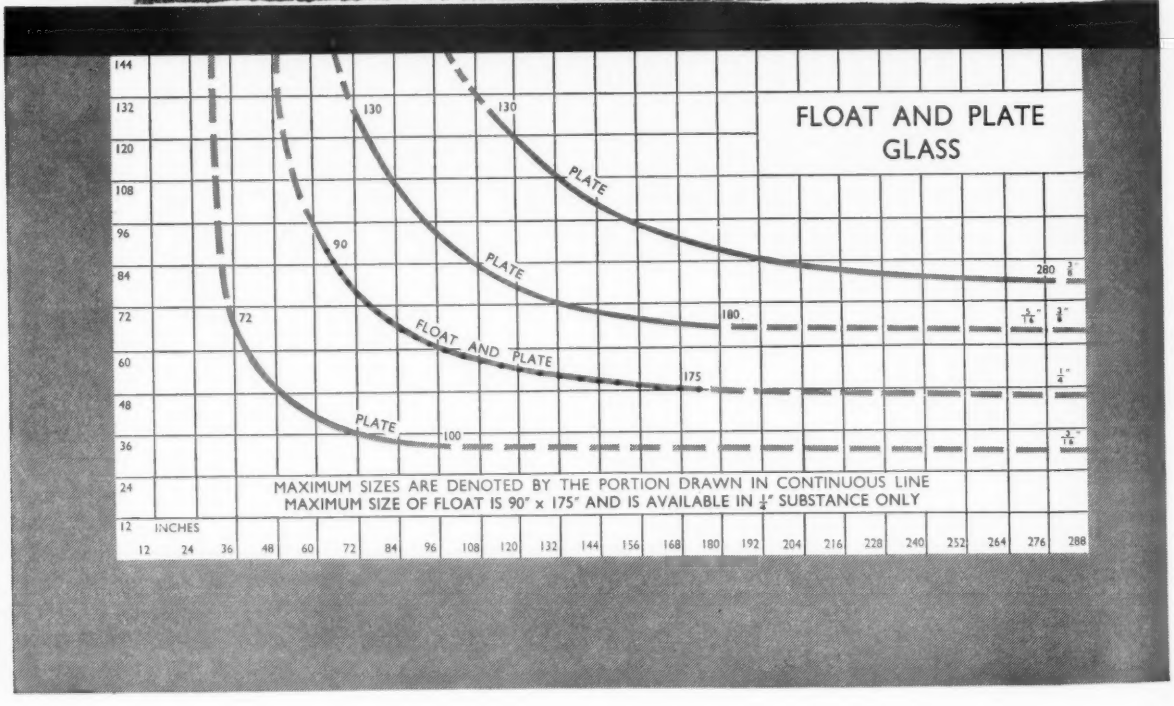

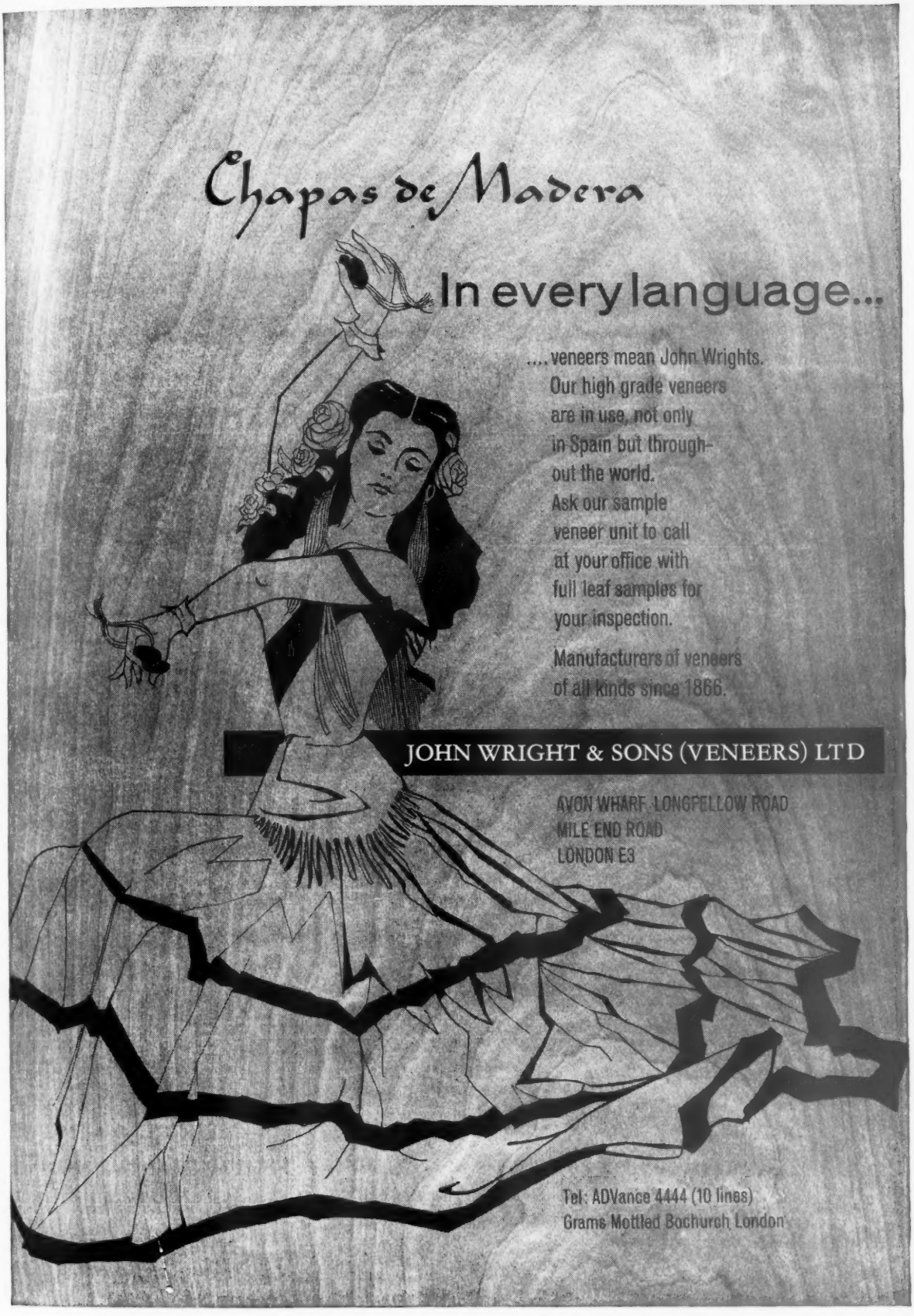
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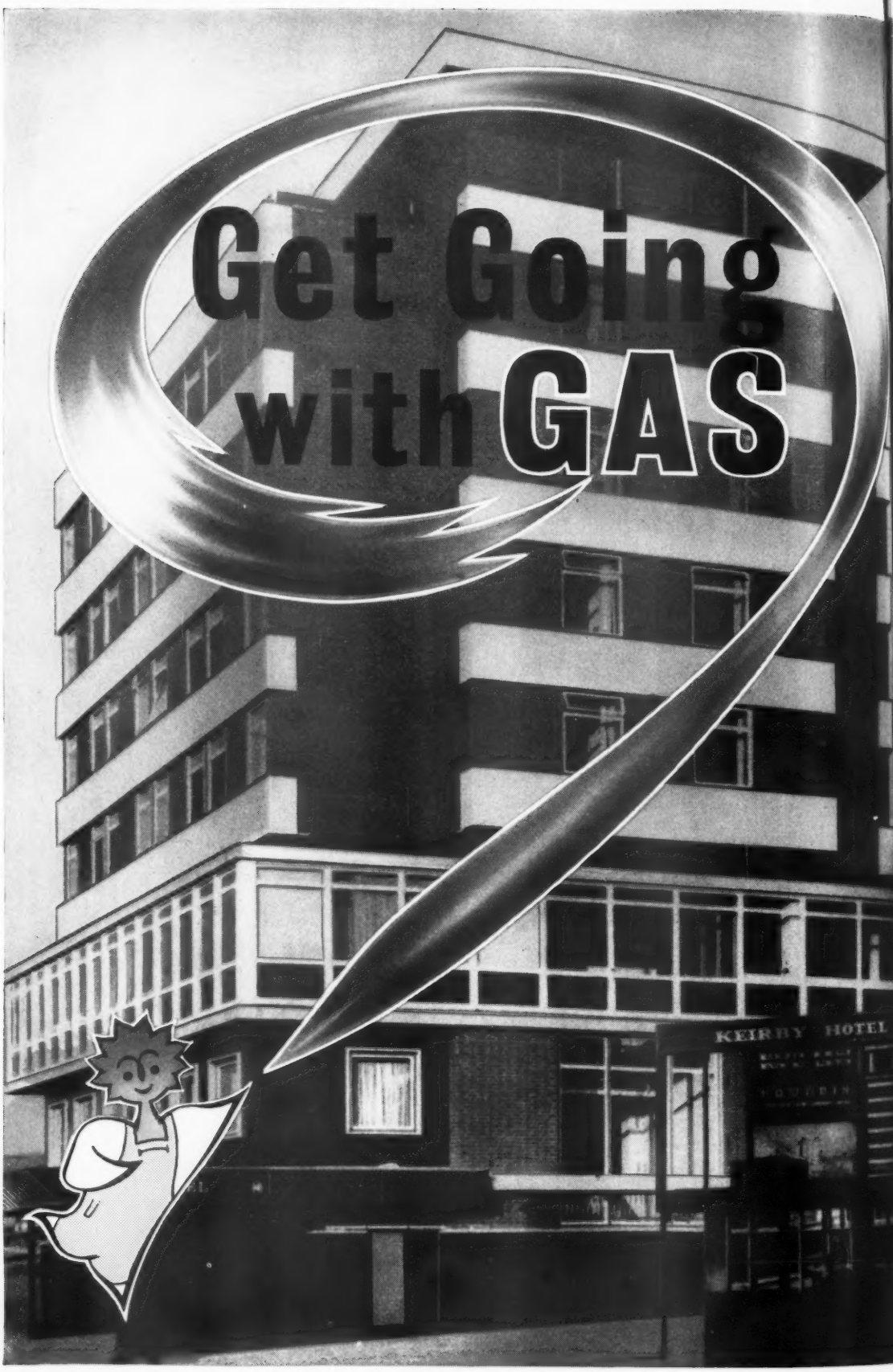
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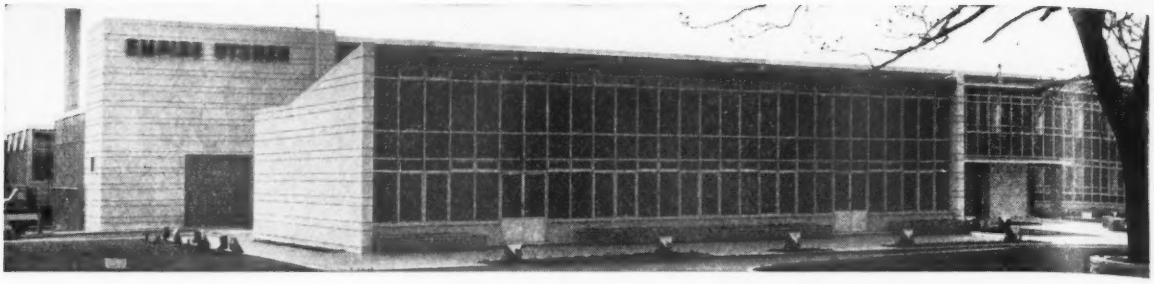

Empire Stores Ltd. New warehouse and offices at Horbury Road, Lupset, Wakefield.

Architects: Michael Egan & Partners, London.
Main Contractors: A. McAlpine & Son Ltd., London.
Plumbing Sub-Contractors: J. H. Shouksmith & Son Ltd., Micklegate, York.

New Warehouse and Offices in Wakefield

Executive and Staff washrooms fitted with 'Standard' equipment.

Empire Stores is one of the country's largest mail order houses. Established in 1831, the firm has expanded rapidly since the war. In line with this expansion, new warehouses and offices have been built in Wakefield where a predominantly female staff of over 120 attend to the dispatching of 30,000 parcels weekly.

In the planning stages of the new building, considerable thought was given to the working conditions and comfort of the staff. In the washrooms, the importance of using 'Standard' vitreous china fittings was stressed as these were considered to be the best, most up-to-date and hygienic.

In the employee's toilet Trimline wash basins were fitted in an island range against a terrazzo plinth, and the water closets are also from the Trimline range. A 'Standard' drinking fountain has also been incorporated.

Kingston basins have been installed in the Staff and Executive toilets, together with the Sano low-level water closet suites. Elsewhere throughout the building, Trimline suites have been fitted.

The advanced design of 'Standard' equipment when combined with the use of vitreous china, gives the architect many advantages when specifying for offices, public buildings and factories. Besides a pleasant appearance, 'Standard' equipment always remains permanently hygienic. The percentage of replacements is small, and the equipment keeps its good looks throughout its long life.

Above) The elegant Kingston washbasin which represents a great advance in bathroom equipment design has been used in the Executives' washroom at Empire Stores. Like all other 'Standard' bathroom equipment, it is available in a range of five colours, plus white.

(Left) Trimline washbasins and water closets in the employees' washroom. The Trimline is low in cost with a high standard of design. Made from vitreous china, it has been used extensively in municipal and other low-cost housing schemes. 549

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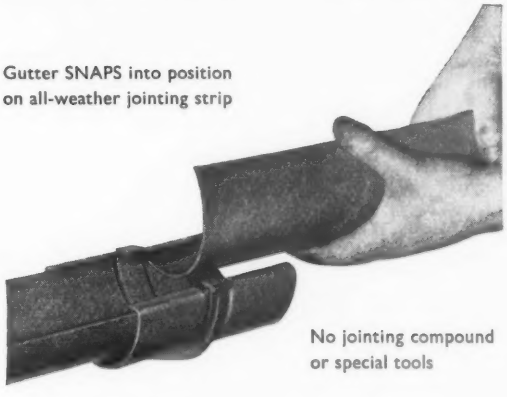

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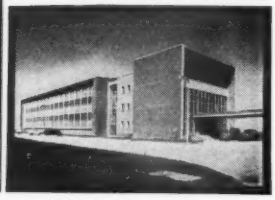

The British Thomson-Houston Co. Ltd., Larne Factory, Northern Ireland.

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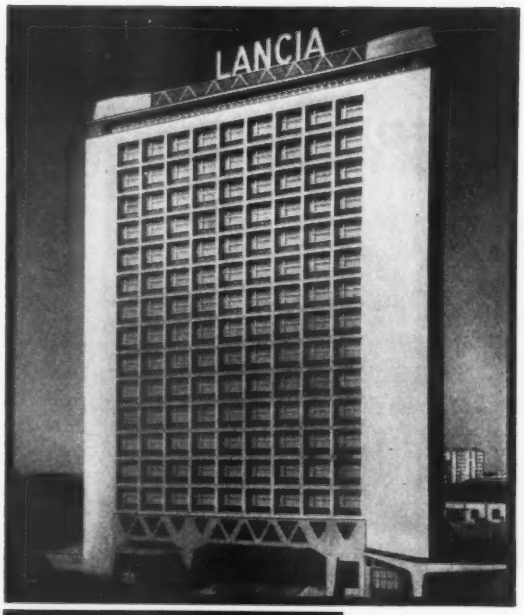
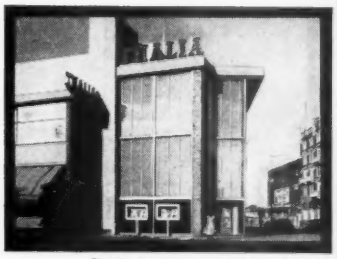
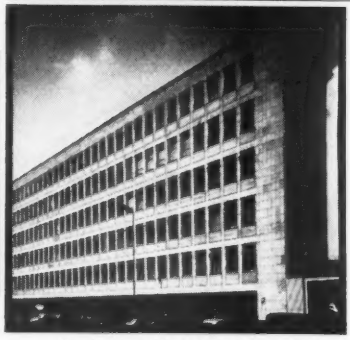


The Lancia Building, Turin, Italy

Neubert Furnishing Store, Würzburg, W. Germany.



The Thalia Cinema, Rotterdam, Holland



The Ministry of Agriculture, Brussels, Belgium.

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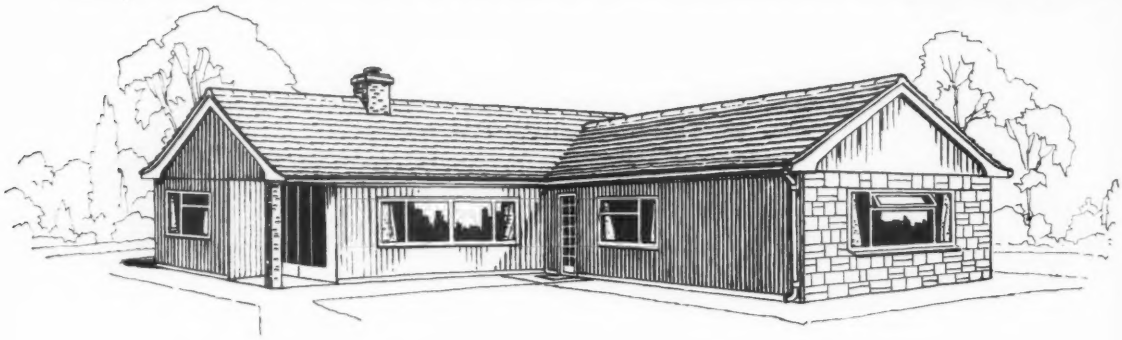

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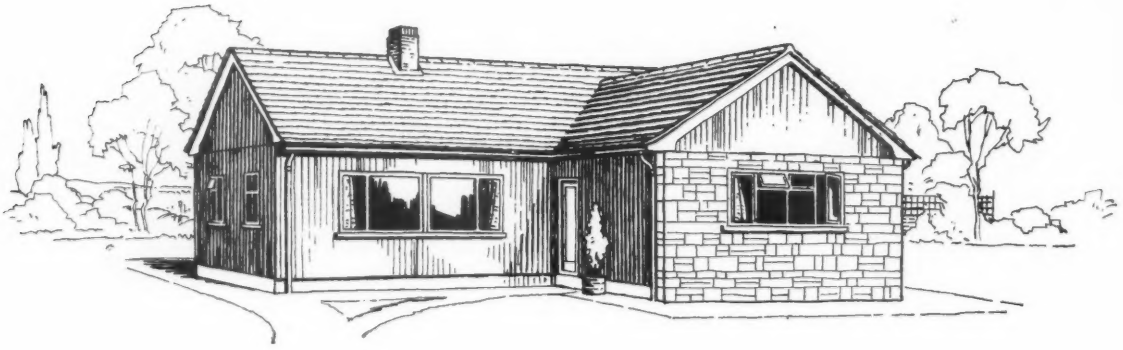

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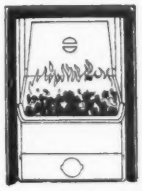

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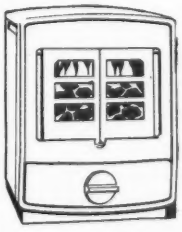

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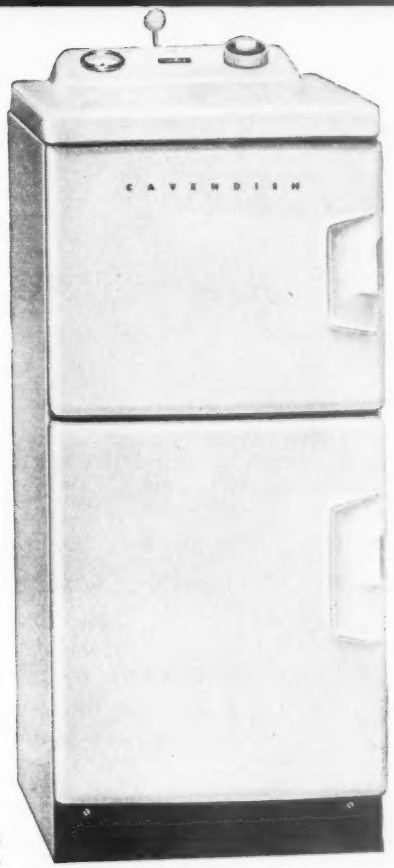

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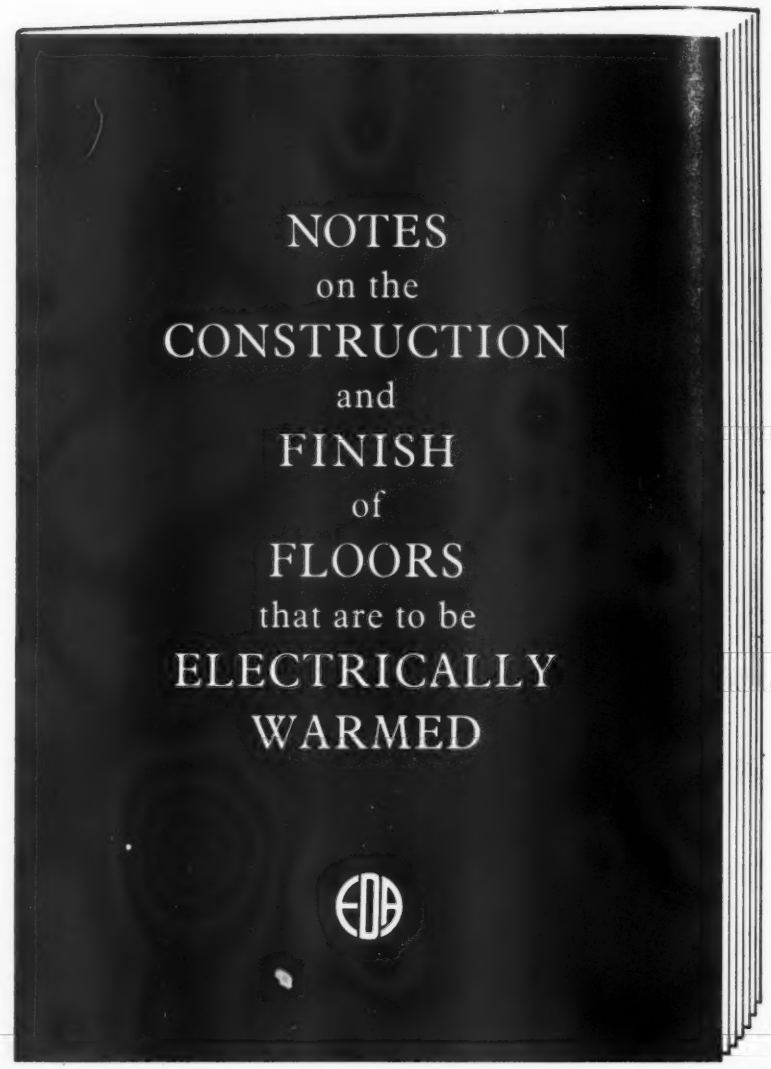

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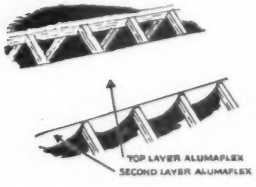

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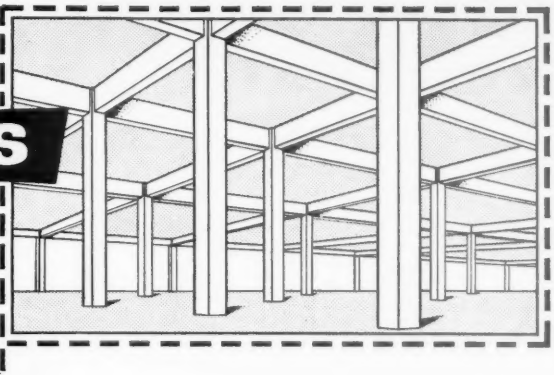

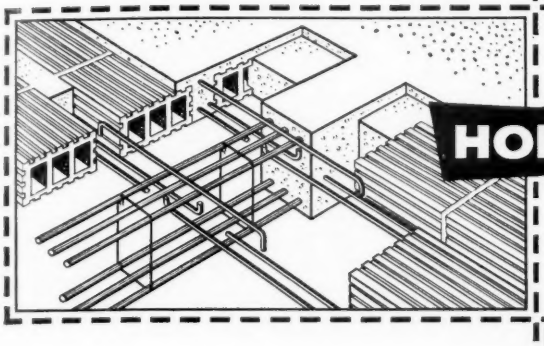

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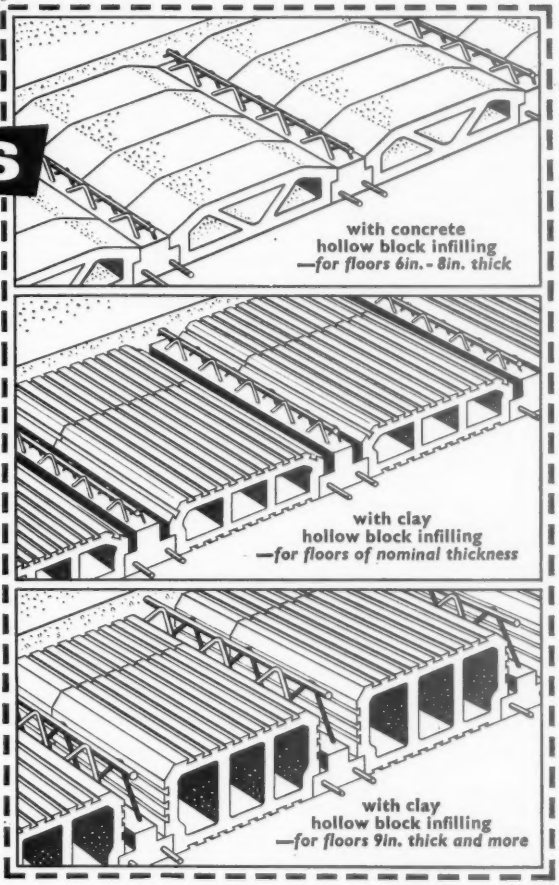

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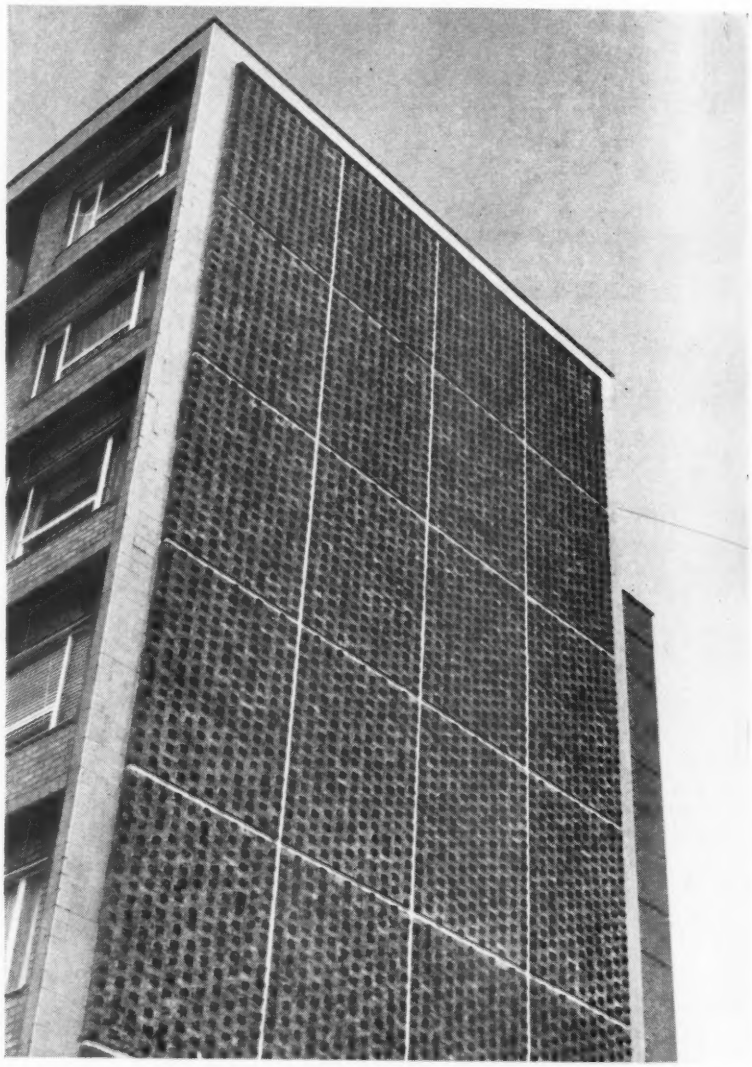

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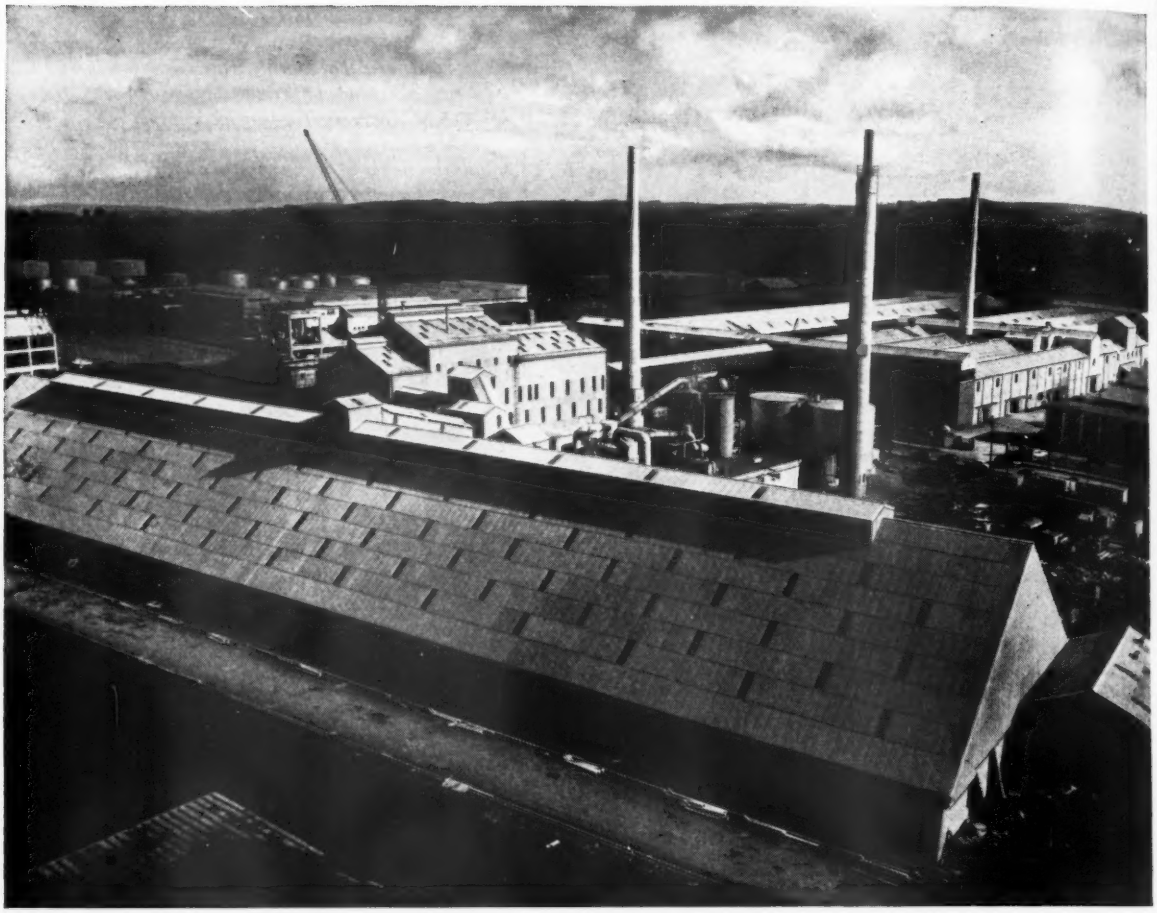

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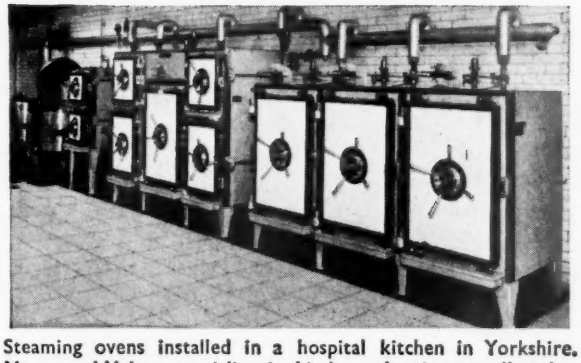

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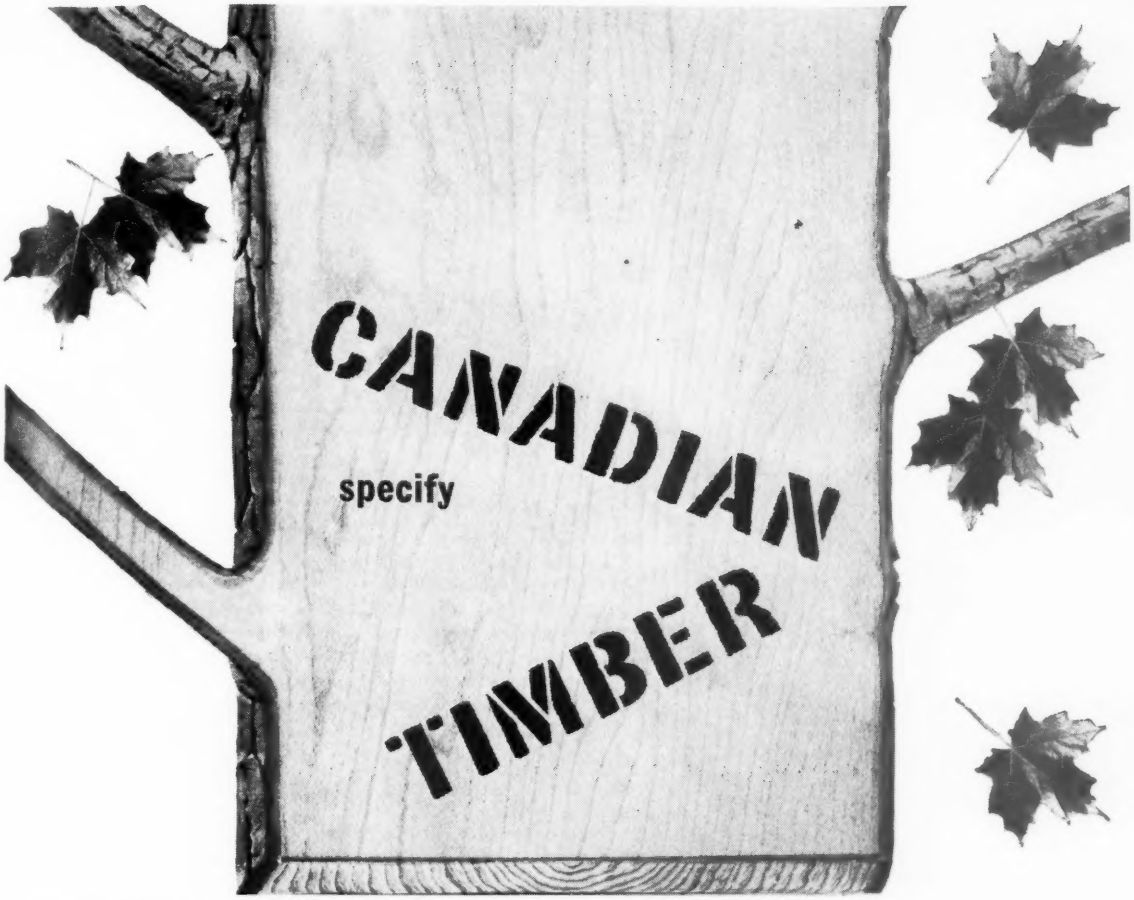

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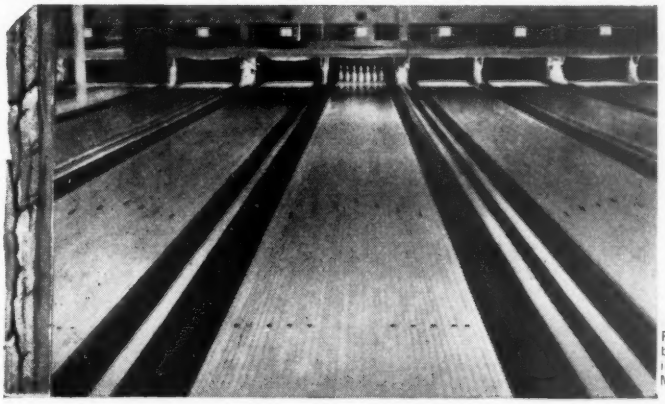

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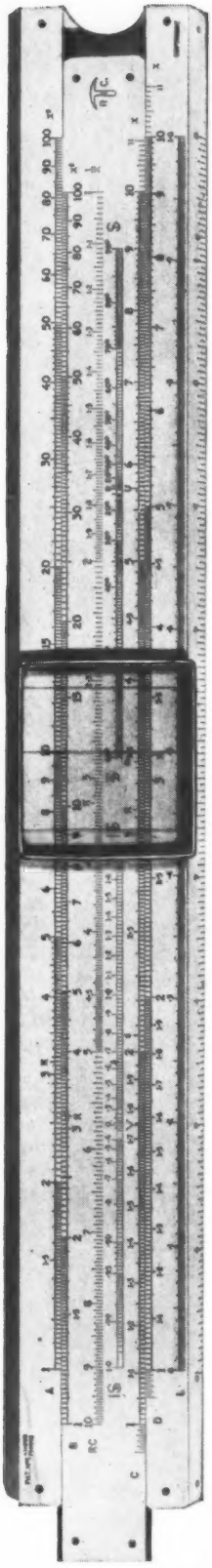

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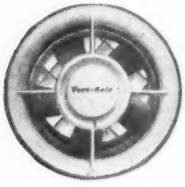

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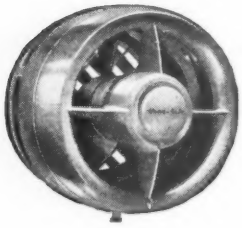

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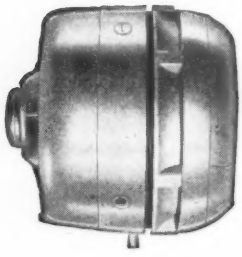

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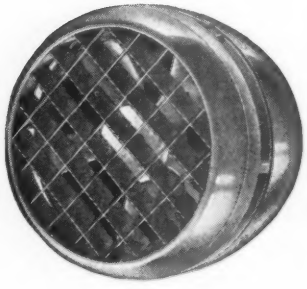

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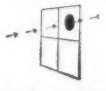

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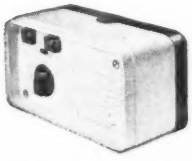

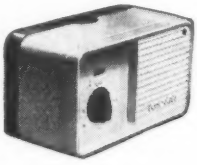

CONTROL SWITCH
TYPE SD

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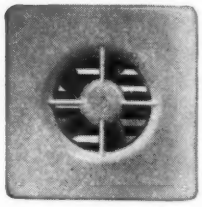
with ivory fascia



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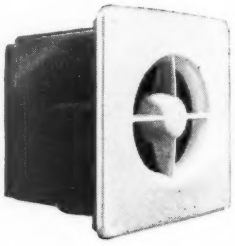

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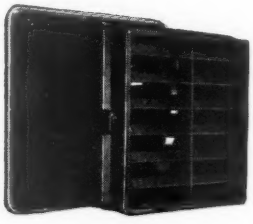

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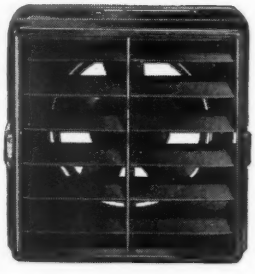

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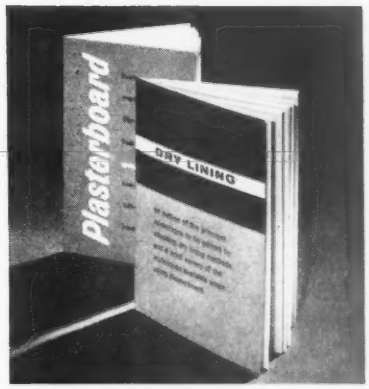

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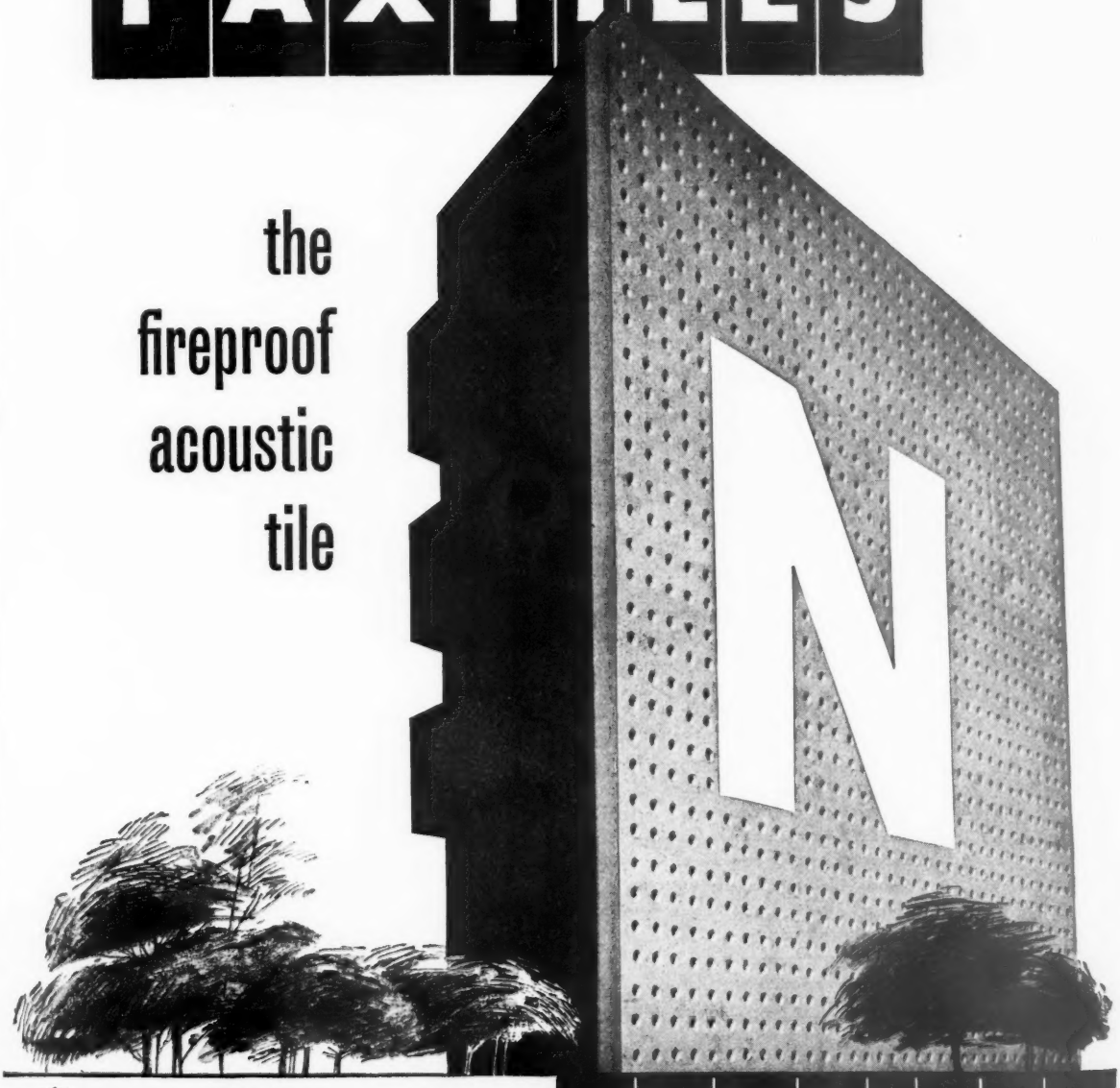

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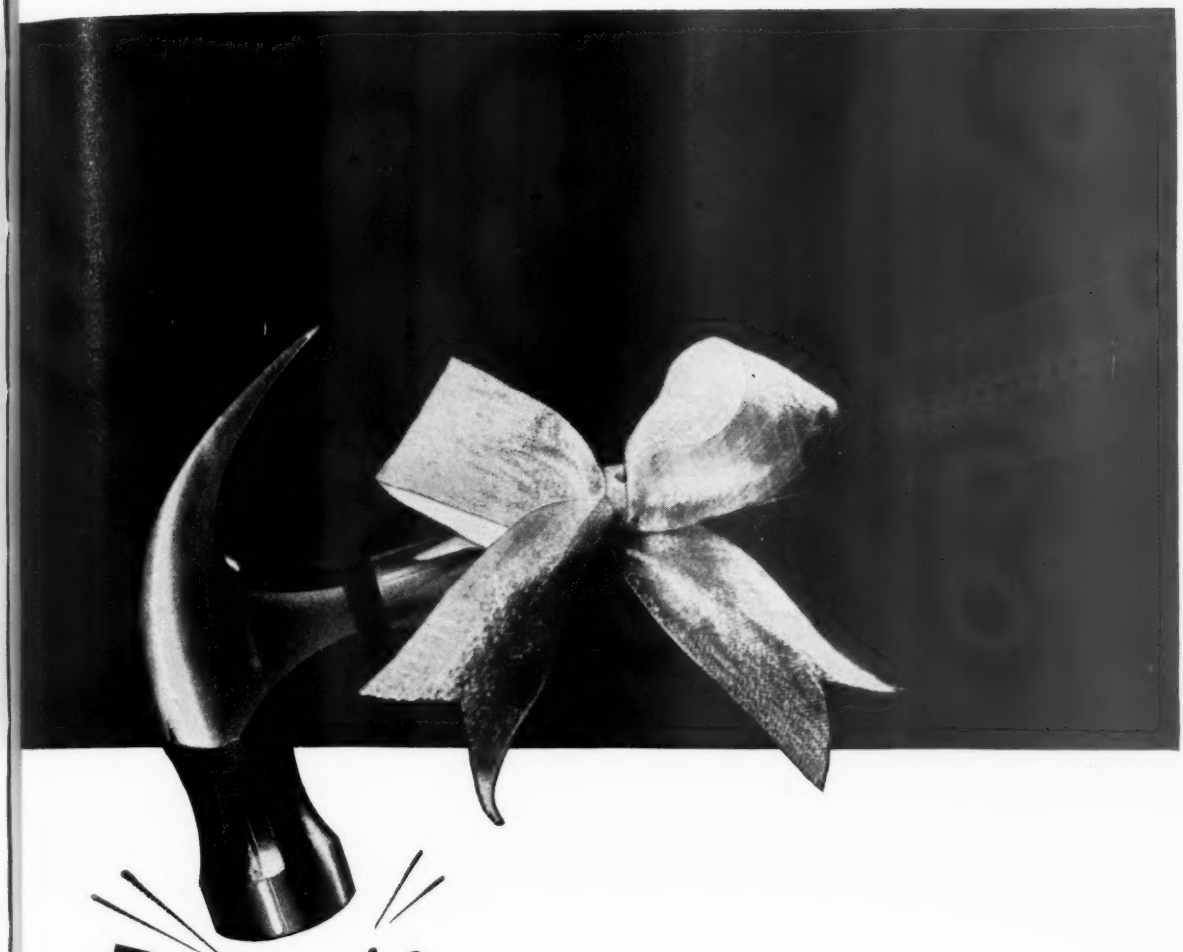

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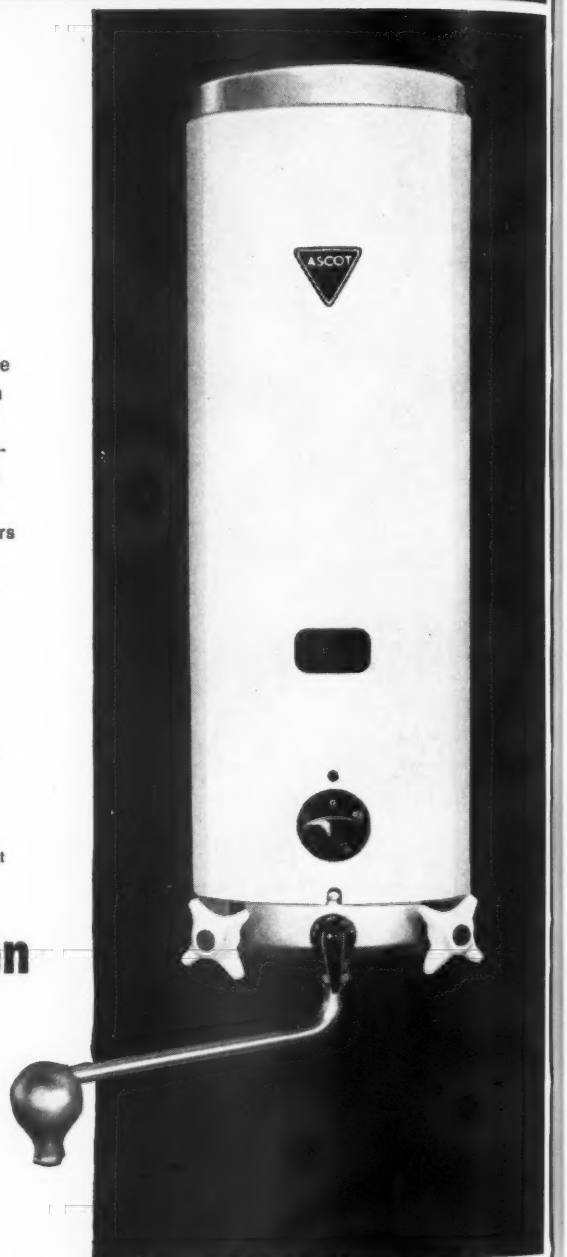

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The Journal of the Royal Institute of British Architects

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December 1961
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Diary of Events

12 December, 6 pm	'Professional Responsibility' by J. P. Eddy, QC.
13 December, 6 pm	Library Group sherry party
23–27 December inclusive	RIBA offices and Library closed for Christmas holidays.
28 and 29 December, 3 pm	Christmas Holiday Lectures: 'London Now and What it Might Be' by Edward Carter, MA, AADIPL. [*A*].
1962	
4–6 January inclusive	BASA Conference in Sheffield.
9 January, 6 pm	Announcement of Award of Prizes and Scholarships. Discussion 'The Architects' Responsibility for the Design of Building Components'.
10 January, 6.15 pm	Junior Liaison Committee of Architects, Quantity Surveyors and Builders: 'Integration within the Building Industry'.

Cover picture

Offices for Dow Agrochemicals Ltd, King's Lynn. Architects: Fry, Drew and Partners [*FF*]. *This building was awarded the RIBA Architecture Bronze Medal for* 1958–60 *in the area of the Norfolk and Norwich AA.* (*Photo: Sam Lambert*)

Council Business

The Council met on 7 November with the President, Sir William Holford, in the Chair.

Points from the Secretary's Report

Trade Literature. A 'Guide to the preparation of trade literature for the building industry' has been prepared by a Joint Committee of representatives of the RIBA, RICS and NFBTE and has been published by the Building Centre. Copies have been sent to a large selection of trade associations and further copies may be obtained from the four sponsoring organisations. More details are given on page 537.

Robbins Committee on Higher Education. The Council was informed that the Board of Architectural Education had submitted written evidence to the Robbins Committee and would be supplementing this with oral evidence on 29 November.

Post-graduate Training Conference. The Secretary reported that this conference had been held from 19–20 October, under the Chairmanship of Professor R. Llewelyn Davies [*F*]. The attendance had been 46 (27 heads of recognised schools; 14 practising architects representing various interests; and five from BRS or building/civil engineering). The four main topics were 'Objects and Forms of Post-graduate Training', 'Standards of Selection and Achievement in Post-graduate work', 'The Staff and Facilities needed for Post-graduate work, and its relation to research', and 'Refresher Courses for Practising Architects'.

Points from Routine Business

RIBA Architecture Bronze Medals. The Jury entrusted with the award of the RIBA Architecture Bronze Medal in the area of the Norfolk and Norwich AA for the period 1958–60 have made it in favour of the offices for Dow Agrochemicals Ltd, King's Lynn, Norfolk. Architects: Fry, Drew and Partners [*FF*].

The Jury entrusted with the award of the RIBA Architecture Bronze Medal in the area of the Devon and Cornwall Society of Architects for the same period have made it in favour of the St Austell Branch Library, Carlyon Street, St Austell. Architect: F. K. Hicklin [*A*], County Architect, Cornwall. Both awards were formally approved by the Council.

RIBA Formal Hospitality

The Council considered and gave approval to the following proposals:

The last formal RIBA Dinner was held in February 1957 at Grosvenor House. No Dinner was held in 1958 because of a temporary financial crisis; and in 1959 and 1960 the Council took the view that a Dinner was only worth holding if it was of 'Royal Academy' standard and attended by guests of the highest distinction. In both years, the Prime Minister, who was regarded as a *sine qua non*, was unable to accept.

In 1961, no attempt was made to hold a Dinner, because of preoccupations with the forthcoming IUA Congress.

It remains to be decided what should happen in 1962. It seems generally to be agreed that failing a memorable Dinner of the kind that has proved difficult to fix, a formal Reception at the RIBA is a good alternative. Members and guests can mix more freely; it is no less acceptable to official RIBA guests, who perhaps hear enough dinner speeches; it brings laymen to the RIBA building rather than an anonymous hotel; and the small press publicity to be derived from it is nevertheless little less than attaches to a Grosvenor House Dorchester dinner.

The sum of £700 already provided in the budget for 1962 would make possible a Reception of good quality at not more than a guinea or 25 shillings per ticket to members.

If a formal Reception were to take place in May 1962, an informal 'RIBA party' of a domestic kind for members and their friends could be held in October 1962, broadly on the lines of the successful one held in October 1960.

New Constitution of the RIBA Council: Electoral Register

The new RIBA Bye-laws are likely to receive approval of the Privy Council in time for the new constitution of the RIBA Council to come into force by the next annual election.

The new constitution provides for the election of both national and regional representatives. Regional representatives are to be voted for on a constituency basis by those members of the RIBA who have a recorded address in the electoral register concerned. The electoral register is now being prepared and will be based on the addresses of members at present used for the dispatch of JOURNALS and communications. *Solely for the purpose of voting in Council elections*, however, a member may, if he so wishes, ask for an address to be used which is in an Allied Society area other than the area in which his present address is located, and this will be recorded in the electoral register. All communications concerning Council elections will be sent to the address recorded in the electoral register, and to no other address.

The new constitution of the Council is to be brought into effect over a transitional period of three years. In the first year (1962) regional representatives will be elected only from the Eastern and Southern region, and from Northern Ireland, and thus only members living in those regions will have a regional vote. In the second year (1963) regional elections will be introduced into the Western and Midland region, and in the third year (1964) regional elections will be introduced into the Northern region.

There are to be three elected members for Scotland, introduced one each year under arrangements to be made by the RIAS and for this purpose the RIBA will need to include in the electoral register all members of the RIBA in Scotland.

Any member in the area of the Berks, Bucks and Oxon Architectural Association, East Anglian Society of Architects, Essex, Cambridge and Hertfordshire Society of Architects, Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects or South-Eastern Society of Architects or in Scotland or Northern Ireland who wishes to have an address recorded for election purposes, *different from that now used for the* JOURNAL *and communications*, should notify the Secretary, RIBA, *not later than* 31 *January* 1962.

RIBA Topics

Work Overseas

The Board of Trade (Export Services Branch) would like it to be more generally known that they are glad to help (*a*) where British architects would be interested in being put in touch with overseas architects in specific countries should opportunities offer for British Commercial Officers to effect suitable introductions: (*b*) where architects from the UK are visiting overseas countries. All such architects are invited to call at British embassies and offices of the British Trade Commissioners where Commercial Officers would welcome the opportunity to help in any way possible.

Any members interested are asked to get in touch in good time with either Mr Rogora (Ext. 896) or Mr B. Bull (Ext. 341), at the Board of Trade, Export Services Branch, Lacon House, Theobalds Road, London, WC1 (Chancery 4411).

National Joint Consultative Committee of Architects, Quantity Surveyors and Builders

The first meeting of the 1961–62 Session of the National Joint Consultative Committee of Architects, Quantity Surveyors and Builders took place at the RIBA on 16 October.

It was announced at the meeting that a Committee to consider ways in which Joint Training and Education for the professional and contracting sides of the building industry could be developed had been established at the suggestion of the NJCC. Sir Noel Hall, now Principal of Brasenose College, Oxford, and formerly Principal of the Administrative Staff College, Henley, has agreed to act as independent Chairman of the Committee. The RIBA Board of Architectural Education, the Board of Building Education, the Royal Institution of Chartered Surveyors and the Institution of Structural Engineers have nominated representatives to the Committee as follows:

RIBA Board of Architectural Education: Mr Edward D. Mills, CBE [*F*], Mr William Allen [*A*], Professor Denis Harper [*F*].

Board of Building Education: Mr H. S. Oddie, OBE, Mr P. M. Shepherd, Professor A. W. Hendry.

Royal Institution of Chartered Surveyors: Mr W. James, Mr A. J. Culley.

Institution of Structural Engineers: Mr L. E. Kent, Mr D. T. Williams.

It is expected that the Committee will begin its work early in the new year. It will report direct to the four constituent bodies and keep the NJCC informed of its progress.

Symposium on Hospital Lighting

A one-day symposium on Hospital Lighting is being held in University College, Gower Street, on 5 January 1962, under the sponsorship of the Ministry of Health and the DSIR Building Research Station. The symposium is designed for architects and engineers, both from regional hospital boards and in private practice, and others particularly concerned with problems of hospital lighting. Papers will be given on the principles of hospital lighting, light sources and engineering, architectural and medical requirements. These will be followed by a discussion. The Conference will be introduced by Professor Richard Llewelyn Davies [*F*] and the principal speakers will be Mr J. Constable, Dr B. H. Crawford, Mr J. Green, Dr S. T. Henderson, Dr R. G. Hopkinson, Mr J. Musgrove, Mr D. J. Petty and Dr Wellwood Ferguson. The cost of the course, including coffee, lunch and tea, will be one guinea. The numbers attending the course are limited and applications, together with the price of the tickets, should be made as soon as possible to Miss J. M. Beauchamp, Ministry of Health, Savile Row, London, W1. Cheques and postal orders should be made payable to the Ministry of Health and crossed 'Bank of England A/c, HM Paymaster General'.

Discussion—'The Design of Building Components'

The discussion to be held on 9 January 1962 will deal with the architect's responsibility for the design of building components. It will be confined to those components available on the open market and not to those designed for an individual or a system of building.

There will be contributions from an architect, an industrial designer and a manufacturer. They will be posed five questions:

1. What types of building components should be designed by a professional designer?
2. In which cases should he be an architect or an industrial designer?
3. When should the designer be on the manufacturer's staff and when should he be a consultant?
4. What abilities does the designer need?
5. What should be his working relationship with the manufacturing firm?

The Acute Problem of Inadequate Access to Modern Blocks of Flats

This was the title of an address read to the National Association of Furniture Warehousemen and Removers at a conference on 26 October. The author, Mr W. R. Godden, made an appeal on behalf of those who have to move urniture into flats on the higher levels of tall blocks. 'You will of course say that such blocks are always equipped with lifts . . . but have you ever tried to get a 6 ft settee into a modern passenger lift? Or even a 3 ft divan? . . . And don't forget that whatever you get in in the way of furniture, you must leave room for at least one man to operate the lift. What is the result of this inadequacy of lifts? It means a very considerable increase in the time required for, and the expense of, a removal, since probably 60 per cent of the furniture will have to be carried up the stairs. Staircases in the majority of such blocks are poor, with awkward turns following the lift-well, and the risk of damage to furniture being carried up is quite considerable!

'I am quite sure that very few people, who have not tried it, realise what exhausting labour it is to walk up and down stairs all day, often backwards, carrying awkward furniture, and I am also quite sure that if this sort of thing increases it will be even more difficult than it is now to get adequate staff.

'I know that the first reaction of the development companies will be that it would be uneconomic to include larger lifts, but after all when you are paying anyway something like £4,000 for a lift, another £500 for a larger cage is nothing to worry about, spread over probably 30 flats.'

The Chairman moved that all interested bodies, including the RIBA, be consulted and this was carried.

Mr Peter Nicoll [*A*], Development Architect, LCC, replying to the points in the paper, said that many local authorities are alive to the problem. Small lifts are also an embarrassment when patients have to be carried on stretchers in a prone position and when coffins are removed.

A few authorities, including the LCC, have now decided to have at least two large lifts in all high blocks and others have the matter under consideration.

RIBA Public Relations

Some members may have missed the paragraph on page 484 of the November JOURNAL which gave the clue to the article on RIBA Public Relations in the same issue. The article was in fact an abbreviated version of a paper on Public Relations prepared by the Public Relations Committee and approved in principle by the Council at their meeting in November.

Do You Play Rugger?

Following up the note on page 485 of the November JOURNAL, will those members who are interested in the proposed game against the RICS, please write or phone Mr M. Earle, 108 Swinburne Road, Putney, London, SW15 (Prospect 6562), stating their club and team, playing position and weight.

New Commissions Survey

Third Quarter's Results and Prospects for 1962

The last two quarterly articles have recorded the bare statistical facts of a slow decline in architects' new commissions. It is time to attempt something a little more useful. One of the principal objects of the new commissions survey is to assist architects to assess what the future is likely to hold for them as well as to enable them to compare their individual experience with that of the profession as a whole. The coincidence of the third quarter's new commissions survey results with the publication of the annual White Paper of Public Investment (Cmd 1522) and the four-monthly FBI inquiry into Industrial Trends makes possible a forecast of the level of the new work likely to come to private architects in the next six to twelve months. (*See Table* 1.)

Taking first the facts yielded by the RIBA new commissions survey: total commissions fell sharply in the first two quarters of the year. In the third quarter they have levelled off. There is no significant change in the total since the April–June figures, and the third quarter total is 9 per cent less than that for the third quarter of 1960; April–June was 7 per cent less than the second quarter of 1960. At first glance this suggests that the decline from the boom level of 1960 has reached the bottom; but as we go deeper into the details this seems much less likely. There is a marked difference in trend between commissions for private owners and commissions for public authorities. (The chart shows this very clearly.) Private commissions have fallen steadily for the last three quarters and at £150 million are now lower than at any time since 1958. Public commissions, after faltering in the first quarter, have marched on to ever greater heights and are now, at £100 million, only £10 million below the record peak of January–March 1960.

This is an area which seems particularly uncertain and a good deal of explanation is needed before one can be sure what is happening. Public housing is up to £30 million; it stood at £22 million for April–June, and at £33 million, the highest ever, in July–September 1960. (Official spokesmen have been very clear that new housing starts are to be delayed in order to reduce the lengthening construction period.) Other buildings for public authorities, of which hospitals form one half and miscellaneous public projects, from power stations to laundries, the other, are higher than ever before at £59 million: this is almost twice as high as in the corresponding period last year. (Though the hospitals and power programmes will not be affected, miscellaneous building is another sector in which the Government has indicated disapprovals will fall heavily.) Only educational building has fallen since last quarter. It is now at £16 million, less than at any period since 1958, but this is in large part due to a fall in new commissions for Universities from £14 million in the second quarter to £4 million in the third quarter, a reduction which certainly does not reflect any change in the Universities programme but only irregularity in the timing of new projects. (*See Table* 2.)

All told, new commissions for public authorities amounted to 40 per cent of architects' new work in July–September. They averaged 25 per cent in 1958–59, and rose to 28 per cent in 1960; the private architect is thus relatively more vulnerable

Table 1 Estimated value of new work for which private architects were appointed

	1959 £ million	Change over previous quarter %	Change over same quarter of 1958 %	1960 £ million	Change over previous quarter %	Change over same quarter of 1959 %	1961 £ million	Change over previous quarter %	Change over same quarter of 1960 %
First quarter	267	+41	− 5	361	+34	+35	282	−14	−22
Second quarter	222	−17	− 2	271	−25	+22	253	−10	− 7
Third quarter	225	+ 1	+60	276	+ 2	+25	250	− 1	− 9
Fourth quarter	270	+20	+42	329	+19	+22			

Table 2 New commissions for private architects analysed by type of building **£million**

Type of Building	1959 First quarter	Second quarter	Third quarter	Fourth quarter	1960 First quarter	Second quarter	Third quarter	Fourth quarter	1961 First quarter	Second quarter	Third quarter
New Housing											
For public authorities	17	28	13	13	18	17	33	16	13	22	30
For private owners and developers	77	57	68	74	108	54	67	107	62	48	45
	94	85	81	87	126	71	100	123	75	70	75
Other new buildings											
Private industrial building	46	32	30	55	54	54	36	39	39	43	35
Private offices and banks	21	14	15	31	20	37	24	31	36	18	16
Other commercial and miscellaneous buildings for private clients	63	37	41	38	54	46	57	37	61	54	49
Educational (public and private)	26	34	23	27	56	31	27	44	38	31	16
Other buildings for public authorities	17	20	35	32	51	32	32	55	33	37	59
Total, new commissions	267	222	225	270	361	271	276	329	282	253	250
For public authorities	53	65	61	61	110	72	80	88	69	82	100
For private owners and developers	214	157	164	209	251	199	196	241	213	171	150

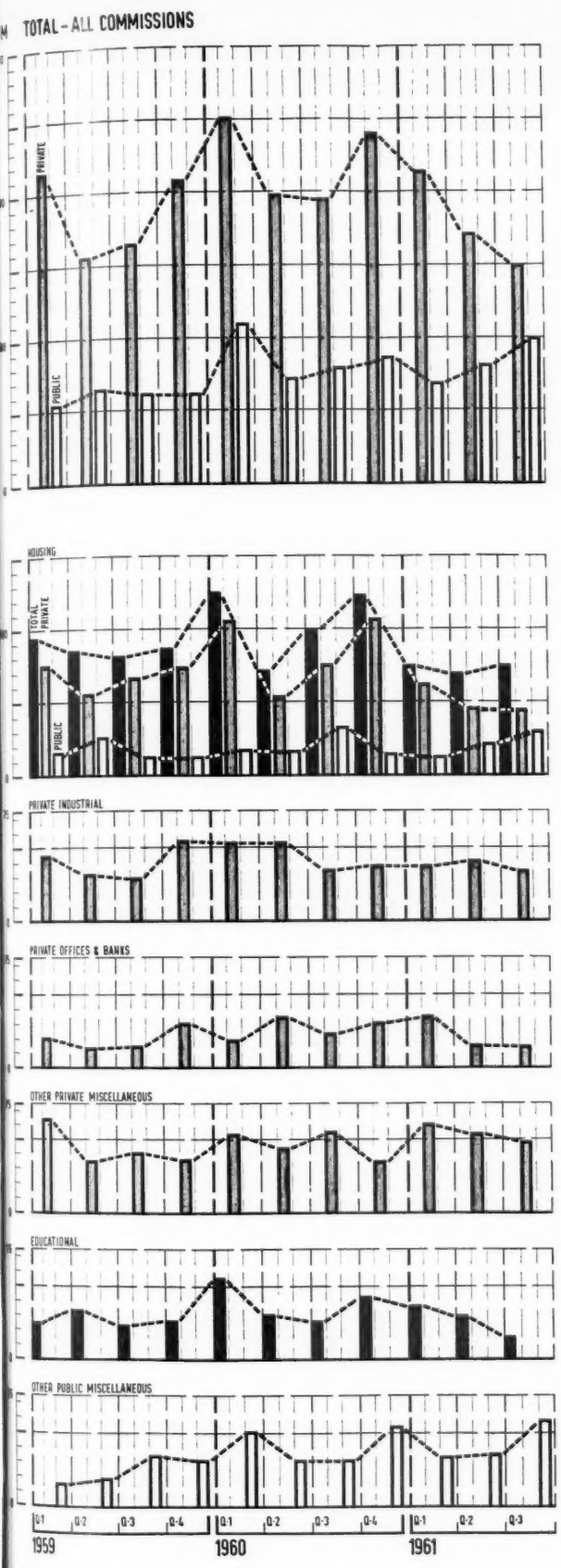


FIG 1: ANALYSIS OF NEW COMMISSIONS FOR PRIVATE ARCHITECTS BY TYPE OF BUILDING

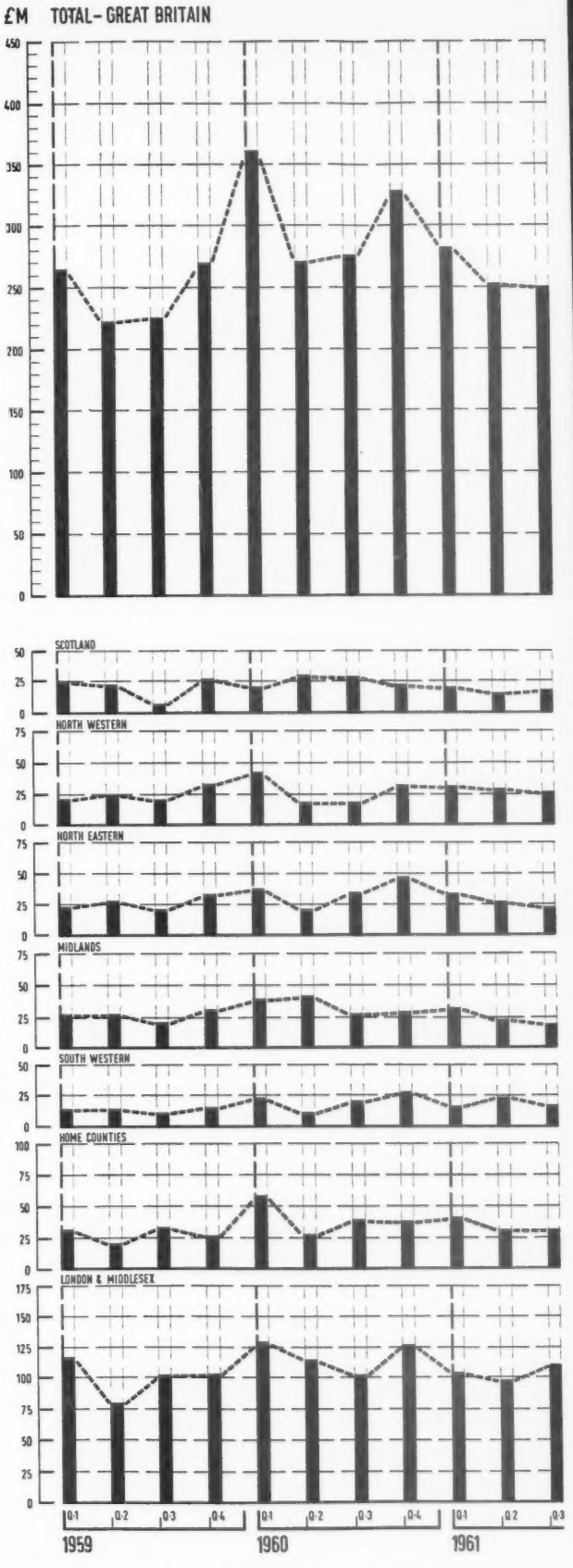


FIG 2: ANALYSIS OF NEW COMMISSIONS FOR PRIVATE ARCHITECTS BY LOCATION OF ARCHITECTS' OFFICE

than in the past to a reduction in the work passed out to him by public authorities.

Public Investment 1962–63

At this point the White Paper on Public Investment becomes relevant. It sets out in considerable detail the expenditure on buildings (as well as plant and machinery) which public authorities will be permitted to make in 1962–63. There can be no direct link between public building plans and commissions given to private architects, because private architects are mainly called on when public architects are overburdened; in this the staffing position of public authorities is obviously a major consideration. Table 3 summarises the information given in the White Paper. Although public expenditure on new construction will be 5 per cent greater in 1962–63 than in 1961–62 this is a sharp reduction in the rate of increase: expenditure in 1961–62 is to be 9 per cent above that for 1960–61 and in non-housing work the difference is even more marked. The Government has repeatedly said that public investment could not be allowed to continue growing at the 1960 rate. The vital programmes for schools, hospitals and universities are unaffected, but public housing is to remain at its 1960 level and other local authority building is only permitted a tiny increase. The main civil engineering programmes, however, for nationalised industries as well as for roads and water, retain most of their previous momentum and the overall effect is that expenditure on buildings will increase by 3 to 4 per cent over the 1961–62 figures, and expenditure on engineering work by 7 to 8 per cent.

Table 3 Public Investment in new construction: Great Britain

	1959–60	1960–61		1961–62		1962–63	
	£m	£m	Change over previous year %	£m	Change over previous year %	£m	Change over previous year %
Dwellings	270	265	−2	260	−2	260	Nil
Other building and civil engineering work	590	610	+3	695	+14	745	+7
Total	860	875	+2	955	+9	1005	+5

It is hard to resist the conclusion that new public authority commissions must soon fall. The boom in the July–September quarter may perhaps be partly due to determination on the part of public authorities to ensure that all projects already approved really start before the end of the financial year. It may be partly due to the coincidence of several major projects. (Very large schemes are anyway not easy to fit into the statistical scheme of the survey and could tend to exaggerate the results.) But any of these explanations can only point to a decline in the next quarter. Moreover, one would expect public authorities, faced with a reduced rate of increase in their building work and a mild recession generally, to keep as much work as possible within the scope of their own staffs. How big could the decline be? One might guess public authority commissions would fall at least to around £80 million, perhaps even to £50–60 million, in each of the next two quarters. But there is really no ground at all for guesses of actual magnitudes and it is best to move on quickly to safer ground and consider commissions from private owners and developers.

All types of private commissions have fallen in the third quarter and the total of £150 million is less than at any time since the second half of 1959. The fall in commissions for private housing since the second quarter is small and might encourage a hope that the bottom of this particular trough is near; but the difficulties of obtaining land and finance have not abated. Commissions for private industrial building, which up till this quarter had not shared in the general decline, have at last succumbed and at £35 million are 20 per cent less than in April–June, though they are still at almost the same level as a year ago. Private offices and banks, as well as commissions for all other kinds of buildings for private owners, have declined by a further 10 per cent compared with last quarter, and by considerably more than this compared with a year ago.

The FBI Industrial Trends Inquiry

Looking at the economy as a whole there is no sign yet of an increase in decisions to commission new building. For industrial buildings at least, the signs are that the decline that has now started will continue. This view is based on the results of the FBI's October inquiry into industrial trends. One of the questions asked of a sample of nearly 700 industrialists is: 'Do you expect to authorise "more" or "less" capital expenditure on building in the next 12 months than you authorised in the past 12 months?' The results are not easy to interpret, but since early in 1960 the proportion expecting to authorise 'more' building has been falling, and the fall between June and October this year is the steepest of all. The proportion (19 per cent) expecting to authorise 'more' building in the next 12 months than in the last is now lower than at any time in the last two years. There is some indication that in the past three years the trend of our estimates of industrial new commissions has followed the trend of the proportion opting for 'more' in the FBI inquiry, though with a time lag of about six months. It certainly seems reasonable that it should do so. It is thus likely that a slow decline in industrial commissions will go on at least until the FBI inquiry trend changes direction again.

There is no similar indicator for offices, banks and other types of private commission. A substantial decline in these has already occurred; one may hope that most of the speculative projects for which long term finance was not arranged before the restrictions have now fallen out of the programme, and that the present level represents building orders which are unlikely to be affected by the present mild recession.

Table 4 New commissions for private architects analysed by region, based on the location of the architect's office

£million

Region	1959				1960				1961		
	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
London and Middlesex	117	79	102	103	128	114	101	126	104	98	110
Home Counties	32	21	33	26	59	28	40	39	42	31	31
South Western	14	14	11	15	24	11	22	27	17	24	16
Midlands	27	27	22	31	39	41	27	28	31	24	19
North Eastern	24	27	22	30	38	22	35	47	33	27	23
North Western	23	25	23	33	42	19	19	31	30	28	26
Total, England	237	193	213	238	330	235	244	298	257	232	225
Scotland	25	23	7	26	22	28	27	23	20	15	17
Total, Great Britain	267	222	225	270	361	271	276	329	282	253	250

A Further Decline in New Commissions?

The forecast must then be that a further overall decline in new commissions is probable and that it will be greatest in new commissions from public authorities. At the roughest of guesses, only included because it seems cowardly not to make one, new commissions might fall to £200–220 million (rather above average level of 1958) for at least the fourth quarter of this year.

The Chancellor has recently said that there were good prospects for steady growth in the economy next year. Architects will hope he is right; but the 1960 boom in new commissions was based mainly on private housing and public authority commissions. A substantial revival cannot be looked for quickly in those sectors; and improvement in other types of private new commissions might do little more than restore architects' new work to its present level. What impact this will have on private practice is hard to guess. Many offices are still very busy with work still in the pipe-line from the 1960 boom. Many offices too, will not want to see the pressure of that year return, for it is in the end the client who suffers when the architects' offices have too many jobs on hand.

This points to an important gap in our knowledge: the lack of an assessment of the amount of work in the pipe-line. As the long-suffering members who take part in the new commissions survey will know, statistics of projects at the working drawing stage as well as of new commissions have been provided by them for some time. It is hoped to publish the first analysis of these together with the new commissions survey results for the fourth quarter of 1961. These will help in assessing the pre-contract work load; at the same time it is understood that the Ministry of Works is preparing an index to show the total load of work on contractors, from acceptance of tender to final account. Thus by the time the next quarterly article is due it should be possible to start to assess changes in the volume of work in the pipe-line.

* * *

Three other small points should be made. The regional analysis of new commissions is unremarkable. London and Middlesex and Scotland have improved their position slightly: other regions have shared in the steady decline.

Large firms have in this quarter held their ground better than in the April–June period and small firms have received correspondingly less new work.

Lastly, cancellations and postponements are in the same ratio to new commissions as in the first quarter, viz. 1 : 10.

Points from the AA Presidential Address

In his Presidential Address to the Architectural Association on 25 October, Mr J. M. Austin Smith, MC, TD, AADIPL.[*F*], said he believed that the degree of social purpose possessed by architects had a marked effect on the way they ran their practices, and that this in turn had a much greater influence on schools of architecture than may be realised. If this was true, then we should look at the effects on offices of both a good and a poor sense of social purpose and see what type of students they subconsciously caused to be produced.

If, at the same time, we made an assessment of the requirements which architects were likely to be called upon to carry out in the next decade, it should be possible to compare what was thought to be necessary for students, with what was subconsciously produced, and see, in the particular circumstances at the AA what responsibilities fell to be discharged upon the membership, the school and the Association as a whole.

First there was the realisation that the exercise of a professional skill was an intellectual process, and secondly, that a profession must have a social purpose, and lastly, that society permitted a profession to possess certain privileges in order to ensure that the community received the kind of professional service that it desired. These privileges were for the protection of the community, not for the protection of the profession itself. Mr Austin Smith saw the intellectual content of architecture as being the application of one's skills to the solving of the problems of the community through the agency of the client who employed you. He believed that architecture was therefore a service to the community, and that the whole of the architect's efforts were concerned with the total performance of the building as seen by the community and the client. The cultivation of a deep social sense must therefore be of major importance, for without it there was a very great danger of losing our sense of direction and purpose.

An essential step in acquiring a sense of social purpose was surely the acceptance of society's requirements. There was naturally much more to it than that, but this must be the first essential step and lead to wider horizons.

It might well be that in the future a greater number of architects would rise to associate and principal level in already established firms than had been the case in the past. That all existing practices were capable of, or were worth being preserved and that no new practices would be started up ever again, was clearly utter nonsense. The starting up of new practices, however, might increasingly take the form of groupings of young architects who had already reached a reasonable high level of responsibility. They would need every assistance possible by the publication of approved and tested procedures. The preliminary work of the RIBA in this matter deserved every encouragement, and the superb application by the *Architects Journal* of the SfB system of classification deserved every praise. It would appear that here the AA also had a responsibility to discharge in helping young practices.

Schools of architecture could not operate in a vacuum. The method of working adopted by the offices they served must have a decisive influence on the whole outlook and approach of the school, whether they realised it or not. If this were so, and he thought it was, then a large part of the responsibilities for the school training of young architects lay in the hands of the principals at present in practice.

For the AA where the interaction of the membership on the school was at the foundation of its very existence, the implications were abundantly clear. There fell upon the members of the Association a duty to searchingly reappraise the working methods of their offices, and to this end the fund of basic facts which the RIBA office survey would provide, should be of great assistance.

If we were going to provide a service to the community one of the first things was to possess the ability to find out what they needed as opposed to what they imagined they wanted. This involved research and development and systematic study of how to obtain information or as it was more commonly known, work study; in fact, the whole problem of obtaining and writing a programme or brief.

This was, he feared, a far from complete list of the knowledge that will have to be acquired *in addition* to the normal design skills. But how in heaven's name could all this and more be added to the present curriculum? The answer of course was that it could not be. But that did not mean that we could forget all about it. This knowledge had to be taught somehow.

This could only mean one thing and that was the diversification of the architect's training. To avoid any misunderstanding he used the word architect in its professional sense, meaning that different types of architects will have to be trained.

New Strategies for Local Authority Building

Paper given by Mrs Elizabeth Layton at the RIBA on 7 November
Mr T Lewis Womersley (Vice-President) in the Chair

The Chairman asked the meeting to approve further revisions to certain Bye-laws, arising from the discussion at a previous Special General Meeting and partly on the formal request of the Privy Council, a draft of these having been published in the RIBA JOURNAL for October 1961 and circulated to all members.

The Honorary Secretary then formally moved the following resolution:

> 'That subject to the approval thereof by the Lords of Her Majesty's Most Honourable Privy Council, the draft of Bye-laws 36(B), 42, 43, 47, 56, 58, 59 and 60, as issued with the notice calling this meeting, be approved and adopted by the Royal Institute.'

No observations having been made, the resolution was put to the meeting by the Chairman and carried, *nemine contradicente*.

The Chairman announced that a further Special General Meeting, to confirm the resolution, would be held on 28 November at 6 pm (see page 531).

In calling upon Mrs Elizabeth Layton to give her paper to the Ordinary General Meeting which followed immediately, he extended a warm welcome to representatives of local authorities – elected members and officers – to representatives of local authority associations, of contractors, manufacturers and operatives who were present.

Mrs Layton was the author of the book *Building by Local Authorities*, published a few months ago, which was a report of an inquiry by the Royal Institute of Public Administration into the organisation of building construction and maintenance by local authorities in England and Wales. She was research officer in charge of the inquiry, assisted by a Steering Committee whose membership included Ronald Bradbury and Clifford Culpin, members of the Institute. Holder of a degree in economics, Mrs Layton was for seven years on the editorial staff of *The Economist*. She had been a member of the Middlesex County Council, a housing manager, a senior executive in the Harlow Development Corporation, and was a member of the Executive of the Town and Country Planning Association.

Importance of Local Authority Building

Mrs Layton said: I do not need to stress the importance of local authority building, but it is a sober and inspiring thought that there are about 15 million people in this country who are tenants in council houses, and that a large proportion of our people spend about ten years of their lives in schools built by local authorities.

Local authorities are now spending about £400 million a year on capital building projects.

They have built getting on for 3 million houses since the war, as well as large numbers of schools, etc.

They employ one-tenth of the country's labour force—about 100,000 building trade operatives mostly on maintenance.

Taken altogether this is a sizeable part of the annual output of the country on building, and is correspondingly important.

Challenge and Response

If this were a sermon and I had to choose a text it would be something from Professor Arnold Toynbee's *Study of History* in which he elaborates the idea that the rise and fall of civilisations depends on the interaction of challenge and response, the challenges to successive civilisations and the vitality of their response to those challenges. In the very practical and modest field of local government I shall be concerned with how to provoke the challenge and how to evoke a lively response to it, and I propose to pursue the idea of challenge and response in the rest of this talk.

The challenge is to complacency, narrowness of vision, the acceptance of the conventional wisdom and the humdrum. If the challenge is vigorous and the response lively, as it has been for example for much school building, then we can expect great improvements in the quality of local authority building, and that without corresponding increases in costs. We can also look forward to much closer co-operation between users and designers and between designers and builders.

I believe that the whole building industry is bogged down with old-fashioned ideas about organisation and much lower standards of design and execution than it could have.

I believe that local authorities could make a very valuable contribution to draining this bog. Indeed some of them are already doing so, but much more could be done.

Role of Central Government

I have too much ground to cover in regard to local authorities to deal fully with the role of central government, which is vital, but time is too short. However, I cannot talk about local government without outlining what I conceive to be the main functions of central government in the building field.

Broadly there are three: (1) political functions; (2) controlling functions; (3) stimulating functions.

The political functions concern the total volume of investment by local authorities in, say, housing or schools and are decisions of the government of the day.

The controlling functions are exercised by government departments and concern annual or longer-term capital programmes, building costs, building standards.

The stimulating functions can take many different forms, but one which has been most successful has been the work of development groups, taking form in the shape of building bulletins or housing manuals.

I do not propose to discuss the political functions, except to say that it is deeply disappointing that the latest economic crisis has once again resulted in a cut in local authority building programmes. The recurrent stops and restarts that have been taking place at two- or three-year intervals since the war have had a most damaging effect on the efficient organisation of building work by local authorities – much more damaging to efficiency and cost-control than the actual reductions in building activity, which have been achieved each time the cuts have been imposed. It is very disappointing too that just when the Plowden Report re-emphasised the damaging effect of this kind of cut, we had within a few weeks of its publication yet another cut in the building programme of local authorities.

The controlling functions are exercised by administrative action, and vary greatly in scope and effectiveness between one service and another, and one department and another.

The aim should be to give authorities the greatest certainty possible about the outside limits of activity and the maximum freedom within these limits. This is a fundamental principle in the relations between central and local government, and one of the things which can make or mar relations between local authorities and government departments.

The clearer the dividing lines between the outer limits of activity are defined by government departments, the greater the discretion which can be left to local authorities to operate within them; and the clearer local authorities are about these outer limits, the more closely what they do approximates to what the government intends and the less close is the supervision which the government department has to exercise over the day-to-day activities of local authorities.

I think this is the fundamental objective of control, both in building and in many other spheres of relations between central and local government.

I commend to all government departments the three main instruments of control used by the Ministry of Education. These are: long term capital programmes, originally running for 2½ years, now extended to 3, and may be extended further; minimum published standards, as in the School Building Regulations; clear cost limits (e.g. cost per school place).

Within the floor, walls and ceiling of this control LEA's have great freedom to plan their schools as they wish. Provided that they keep to the programme and to the required standards and to the clear cost limits, they can be virtually certain that their plans will be approved, and detailed examination of their plans, or discussion, can be reduced to the minimum.

That seems to be a most efficient method of exercising control, and one which our inquiry showed was much appreciated by local authorities and made for easy relations between authorities and the ministry.

The best example of the stimulating functions also comes at present from the Ministry of Education. I regard the methods of the Development Group – first started in Hertfordshire and taken over by the Ministry of Education – as the most exciting thing that has been done about building by the central government.

I say this with great enthusiasm, because this has had a tremendously stimulating effect and it has now been adopted by other government departments. I think we can now expect equally stimulating developments to come out of the Ministry of Housing and the Ministry of Health as their development groups get going.

I should make it clear that with all my enthusiasm for development groups, I do not regard these as a method which can be adopted by local authorities, at least not independently. The scale of the operation, the cost and the depth and breadth of development group work, make it difficult for local authorities to take it up on anything like the same scale.

It is possible that the London County Council, or a group of authorities, could do something of this kind, but on the whole I am always apprehensive when people seek to put the development group label on to something that was more or less doing it already and giving it a new look, but where the basic structure remains the same.

So I am doubtful if the development group idea can extend rapidly very far, in spite of its great value and the work it has done.

Objectives of Local Authorities

What then are the objectives of local authority building (given of course the right framework by central government – the outside limits and the freedom within them)?

These are:

(1) To produce buildings which are functionally suited to their purpose;

(2) To get value for money;

(3) To build buildings which are, if possible, beautiful and at the least pleasing.

I am afraid I regard a great deal of local authority building as drearily dull. Sometimes it is also downright poor in functional design. And much of it, in spite of all the fuss about costs, gives less good value for money than it ought, partly because the savings are made on the wrong things and costs are not controlled in the best way.

Please don't misunderstand me. Local authorities are certainly no worse than other public or private organisations and some are very much better. But local authorities have exceptionally good opportunities to excel, and too many fall far short of these opportunities.

I propose to suggest seven ways in which local authorities might improve their methods. They are all a challenge and stimulate a response.

Research

Research and Development Work. I expressed some misgiving about the extension of development groups to local authorities, though I should like to see more co-operation between ministries which have development groups and local authorities as there is great scope for this. This kind of work is in danger of becoming fashionable without a realisation of the scale, quality or cost of the work involved.

I understand that the Ministry of Education is co-operating with a number of local education authorities on some development group work and that one of their future policies will show this. I hope that some of the development groups in the Ministry of Housing and the Ministry of Health may also be able to draw on the experience of local authorities, because I am sure that local authority representatives here tonight will agree that local authorities often have much more direct experience of the services they operate than do government departments.

If, however, they cannot afford development groups, I am 100 per cent in favour of every local authority doing some original research and development work of its own. I should like to see every authority in time spending the equivalent of ½ to 1 per cent of its annual capital expenditure on research.

The benefits are threefold.

1. Not only does the building industry spend far too little on research and development, so that any contribution from the local authorities would be valuable; but –

(2) The very fact of doing work of this kind within an authority acts as a stimulus. It has an important psychological effect on both officers and members, who feel that an authority is doing some original work and contributing to the greater efficiency of building and to the greater comfort or service of the users of the buildings.

(3) On the practical level, the buildings are likely to give better value for money if work of this kind is done.

A good many authorities already do some testing of materials, particularly for maintenance, but I believe much more could be done about user needs and the design of buildings, and building methods especially, as these make for more efficient methods of building on the site, bringing together designers and those responsible for the erection.

There is immense scope for getting closer to the real needs of the users of the building, and to the problems and methods of those responsible for erecting and maintaining the buildings, be these contractors or a direct labour organisation.

I am always nervous about using the word 'research', so I will use the term 'research development'. The kind of research development I have in mind could in most cases be met by a more elastic establishment policy. A fund of ½ or 1 per cent of the capital programme would allow room for staff from different departments to be released from normal duties for a period of special work. By knowing the sum annually available research programmes could be worked out in advance. I am against recruiting people permanently for research and the real value of this work is that it brings people in for a few months from the architect's department, from the housing department, from the works manager's department or from the children's department to work on a building jointly and work out what is needed.

In this way original investigation is spread around the whole organisation, instead of being concentrated in a few people who come to be associated not with responsibility for carrying out schemes but merely with thinking out probably not very practical solutions.

CLASP are devoting ¼ per cent of the cost of the capital programme to development work. One hopes this proportion will increase, as it has already had such valuable results. I hope that this example will be followed by other authorities.

Authorities with direct labour organisations have a wonderful instrument for experiment in their hands. The RIBA inquiries showed that on the whole very few authorities were using such opportunities to get architects and those responsible for building into much closer touch and for doing development work along these lines.

Fairly recently the LCC has set up an organisation for doing this, and authorities with sizeable labour organisations could do this to advantage.

Visits. Secondly, I come to what may seem a small point. This is the challenging effect of visits to other authorities to see what they are doing. This is a good way of spending rate-payers' money – sending officers to other authorities to pick up ideas from them. I am sure this has a really stimulating effect and is a good corrective to complacency. I would also press for visits to new towns and abroad.

These visits are really important. I have been horrified to find how stingy some local authorities are about releasing their officers or paying their members to go and see what other authorities are doing. This is a vital way of keeping alive the goose who lays bright ideas. If both senior and junior officers are not encouraged to the best that is being done elsewhere, the bright ideas soon dry up, or else officers leave and go elsewhere where there is more latitude on this point.

Place of the Chief Architect. Thirdly, I come to the place of the chief architect. In this building I need hardly stress the importance of having a chief architect in charge of a council's architectural work, if the volume of work justifies a separate appointment.

The point at which the work does justify such an appointment is arguable and cannot be narrowly defined. It is also highly controversial. But there are a number of quite large authorities who have no chief architect. Frankly I do not see how any large, or largish authority with a reasonably large building programme can hope to build successfully without putting architectural design into the hands of a chief architect. You cannot hope to attract an able man to a subordinate post. And you cannot attract able young architects unless they can expect the man at the top to talk the same language. Ability will follow where ability lies, and the likelihood of getting this with a chief architect in charge is much greater than where there is not one.

Small authorities can get round the difficulty by employing good private architects. The large cannot.

I must be honest and say that not all chief architects are inspired originators, but the chances of getting good results are greatly increased wherever such an appointment is made.

Use of Private Architects. Fourthly, I come to a hobby horse of mine – the use of private architects. I was astonished during an inquiry at the almost pessimistic feelings revealed against the use of private architects by local authorities. We sent out a questionnaire which we thought would reveal a variety of opinions. Not at all. These are typical answers:

'The policy is to avoid the use of private architects, but the Council has been compelled to employ them . . . because of staff shortage.'

'The Council did not find that the employment of private architects increased the output in any way. . . .'

Private architects are, of course, extensively used by local authorities, but not generally to the best advantage. The difficulty arises from faults on both sides. To be brutal – there are a great many unbusiness-like private architects who are incompetent about keeping to time-tables and cost targets. Equally there are far too many authorities who ask the impossible of their private architects. To solve their own bottlenecks they offer impossible programme schedules, the briefs are often poor and they expect from the private architect a knowledge of procedures only possible for experienced full-time officials.

The private architect has a much more constructive function to perform than stopping gaps, or even building the occasional town hall. His most important function is to introduce new ideas; to challenge the conventional wisdom; to stimulate the official architects to give of their best; to help break the dreary monotony of a good deal of council building. This applies particularly to housing.

I do not want any private or official architects to get the impression that I am saying that all private architects are wonderful and all official architects are terribly dull. There are good and bad on both sides. It is, however, very easy for the official architect, who is churning out the same programme year after year, to get into a rut if he is not challenged by someone from outside with fresh ideas, who may be no more able as an architect but has not been working on the same routines.

For instance, it is no accident that most of the best public enterprise housing (apart from tall flat schemes like Roehampton) is to be found in the new towns which use a high proportion of private architects. In my view the housing in Basildon, Harlow and Stevenage is outstandingly varied and interesting. All these development corporations deliberately give about 40 per cent of their housing work to private architects. This has improved the quality of official architects' work and has had a healthy and stimulating effect on new towns generally. I think this is one of the reasons why the new towns I have mentioned produce much more interesting housing than do many local authorities. So I commend to all authorities the regular use of private architects for a proportion of their work.

Challenge of Costs. Fifth – costs: Most people regard costs as a wet blanket but I think these should be regarded as a challenge. At any time society, as interpreted by the reigning government, must determine what is a reasonable cost for schools or houses or fire-stations. If a government department can demonstrate in bricks and mortar that its cost targets are practicable this is a great help. The Ministry of Education has done this in the schools built by the development group. I hope the development groups in the Ministries of Housing and Health will be able to do the same for housing.

But whether they do or not I am sure that it is only possible to get value for money if authorities insist on cost planning from the earliest stages of design, and get the quantity surveyors, official or private, working with the architects from the outset. Authorities who bring in the quantity surveyor when the design work is nearly complete will never get their costs under proper control.

Half the economies made just before going to tender, and half the subsequent headaches on maintenance that arise are due to unsystematic methods of designing without continuous control of costs.

Our inquiry revealed that many authorities, as is common practice, only brought in their quantity surveyors – particularly private quantity surveyors – when the bills of quantity were nearly completed and they were just going to tender. This is far too late and I hope local authorities will change their practice on this, and in so far as there are certain difficulties over fees and so on, I hope the professions will get together to solve this problem.

CLASP. Sixth – we come to CLASP, or the Consortium of Local Authorities Special Programme. I do not propose to discuss CLASP in detail, but I might

say that just as development groups have been the most creative and exciting form of new thinking about building in central government, so CLASP to my mind is the most important new form of building development among local authorities.

I am delighted to know that Shropshire is taking the initiative in working out a second consortium, called SCOLA.

The success and potentialities of CLASP are so great that I am hoping desperately that some housing authority will now take a further initiative and do the same sort of thing for housing programmes, perhaps with some other special structural solution. This initiative is long overdue. CLASP was to some extent a response to the challenging work of the Ministry of Education's development groups and I now hope the Ministry of Housing's group will produce the same challenge and evoke the same response from some housing authorities.

I should like to make it clear that the achievement of CLASP is not only an ingenious new flexible steelframe building. That is just an historical stepping-stone. It has three much more important achievements:

(1) The acceptance by local authorities of the advantages of joint action on a continuing basis. Incidentally, it is wonderfully free of heavy administrative machinery. It seems to work with one meeting a month between a few officers, with no formal procedure, and I understand that not even standing orders have had to be altered for this.

(2) The recognition of the importance of research into building techniques and materials and of the advantages of pooled efforts to this end. This ties up with my suggestion that all authorities should set aside a sum of money for research, and if set aside jointly, the result will be much better.

(3) The recognition of the economic advantages of large-scale orders for components, and collaboration with the manufacturer.

At long last there is a client organisation among local authorities which sees the potentialities of co-operation with the producers. Would some housing authorities, please, follow suit?

Co-operation with the Contractor. This leads straight to my seventh and final point – co-operation with the contractor.

The gulf which divides the builder from the architect and his clients, the idea that the contractor begins where the architect ends, is responsible for much of the inefficiency of the building industry.

Architects are far too little aware of the production problems of the builder on the site, of the costs in terms of site labour of minor variations in their designs, or of the economics to be derived from designs and specifications which allow the continuous, consecutive and economical use of heavy plant.

Similarly contractors are accustomed to accept the architect's peculiarities and possible inefficiencies without demur and to secure appropriate cover in the tender price.

This is a ludicrous and wasteful division of function.

One of the best challenges to architect and contractor alike is for authorities to set aside their standing orders from time to time and to allow architect and contractor to work together on schemes, and to do this through a negotiated contract.

There have been outstanding examples of this kind of work, e.g. Picton Street – LCC, and Millpool Flats, Birmingham.

I understand that the Development Group of the Ministry of Education does this in nearly all their schemes when building schools for local authorities.

These kind of experiments ought to be used by a large number of authorities all over the country to put architects and contractors in close touch. I would suggest that large authorities might have one scheme of this kind a year and small authorities one every five years. There should be a constant renewal of contact between architects and contractors so that they see one another's problems at first hand and learn to talk one another's language to some extent.

Here again the Ministry of Education is very ready to encourage this kind of negotiated contract because cost limits are already available to fix the ceiling price and therefore there is not the same problem in having negotiated contracts. At present there are no similar cost limits for most types of housing. Therefore this is more difficult, but it should not be a hindrance. With or without them, co-operative planning and cost-control between designers and builders is urgently necessary to make building more efficient.

Conclusion

So we have, for the new strategies for building, a series of challenges and, I hope, vigorous responses.

The future of the building industry depends on how much close integration there is between design and production.

These cannot operate effectively unless central government itself provides a framework within which local authorities can operate with reasonable certainty and with reasonable freedom. Nor can central government control costs and standards with skill, confidence and tact unless it has at its command authoritative knowledge about the buildings concerned. Hence one of the main advantages of a ministry having a development group of its own, and erecting some of its buildings is that it has first-hand experience. Nothing is more exasperating for local authorities than to be given advice by people who appear to be less experienced than themselves.

May I recapitulate my suggestions for action by local authorities?

1. Much more research and development by local authorities, with an expenditure of ½ to 1 per cent of the annual capital programme to finance this work, is needed.
2. Much more curiosity about what other people are doing, including visits to new towns and abroad, and a much more liberal attitude towards time spent by officers on these visits.
3. The appointment of a chief architect whenever the volume of the architectural work warrants it.
4. The deliberate commissioning of able private architects to bring in fresh ideas and to challenge the official architects.
5. Much more cost planning and cost control with the quantity surveyor working with the architect from the outset of the design.
6. More organisations like CLASP, particularly for housing, where the volume of building is so large and the diseconomies of small scale ordering so great.
7. Much more collaboration with contractors (and for that matter with the direct labour organisations) to secure more efficient and cheaper building, and greater understanding of common problems. Of all the possible methods of improvement the last is perhaps the most important of all.

The Chairman then called upon Mr F. J. Bradshaw, Borough Treasurer of Ipswich, and a member of Mrs Layton's Steering Committee, to move a vote of thanks.

VOTE OF THANKS

Mr F. J. Bradshaw (Borough Treasurer, Ipswich) said it was a great pleasure to propose on behalf of the Institute a vote of thanks to Mrs Layton because he could appreciate how much original thought had been put into her book. Unerringly she had selected all the most controversial points arising from her research, presenting them challengingly and with complete impartiality, and had posed a solution.

As the only member of the Steering Committee interested in finance, he was preoccupied with the question of costs, and of value for money. He had a strong impression that anxiety about costs was a long way down the list and well subordinated to design and other aspects of building. This was all the more noticeable because the outstanding achievements of the Ministry of Education development group generally showed clearly that good design and efficient user were not inseparable from reasonable costs. Indeed CLASP showed the potentialities of a combination to secure the benefits of standard components bought on a large scale, made possible by

completely fresh ideas in design and construction.

Those performances, outstanding by any standard, threw into sharp relief over a wide area of local authority building those instances where costs had not been so critically examined, and Mrs Layton had drawn attention to this in her book. Questionnaires she had circulated demonstrated that flats erected by different authorities, providing somewhat similar accommodation and built at the same time in different places, showed variations in cost per flat of no less than £1,000. This fact should be a stimulus to research.

Costs, in the way he was thinking of them, were running more widely than capital costs. Even more strikingly, total cost – i.e. initial cost plus the subsequent running cost – which should be one conception, was rarely so. Yet the running cost of a local authority building was no less an expenditure of public money than the initial capital cost. For example, the subsequent running cost of heating a well-designed building with large areas of glass should be considered at the design stage and measured against the possible capital cost entailed in more efficient insulation, because the latter might involve much less expenditure of public funds than would an unjustifiably high running cost.

The necessary research into this and other matters needed to be on a broad front to be effective. Taking up Mrs Layton's suggestion for bringing together the architect and the quantity surveyor at an early stage, Mr Bradshaw went further and added the engineering interests, the building interests and the users' interests, all of which had a contribution to make. It had often been said that in matters of building the architect should be the leader of the team. A leader had responsibilities, and the duty of propagating the necessity for this wider concept of co-operation at the design stage rested largely on the members of the Institute – indeed, they should exercise the strongest pressure in this respect.

Incentives were very much a part of modern life and he wondered if there should be research to determine the desirability of adding to the formulae upon which fees were calculated a weighting factor to provide a tangible incentive to economy, with perhaps a disincentive to extravagance.

The Chairman called upon Alderman Small, who, as Chairman of the Finance Committee of Nottinghamshire County Council, the initiating authority, had been prominently associated with CLASP, to second the vote of thanks.

Alderman Small said that Mrs Layton's stimulating paper marked a milestone in their outlook on and appraisal of the responsibilities and opportunities of local authorities in the second half of the 20th century. He hoped that the old ideas to which Mrs Layton had referred would be affected by the fresh air blown on them, and that the challenge issued by her would stimulate the elastic minds still existing in local government, in the building industry and in architecture, to great efforts in the future.

Taken together, local authorities were the biggest single builders in the country. Therefore it was reasonable to assume that they should take the place of the old patrons of architecture and building. Indeed, if there was to be patronage and stimulus and opportunity, local government might give these in co-operation with central government to a greater degree than anybody else. In that event local government, and those closely associated with it, must be interested in design problems, in technical problems, and in financial issues, all of which were closely interlocked and interwoven. They would not get very far unless they were ready to address their minds to this.

Previous patrons of building and architecture spent their own money, whereas the local authorities spend public money, hence the need for control, on which there must be a new outlook. In this connection he recalled that in 1955 and 1956, when the Nottinghamshire Finance Committee first looked at this problem and before the consortium came into being, they had to discard what had hitherto been regarded as absolutely necessary to management control.

This led to selective tendering and to serial contracting. Most people understood selective tendering but were not perhaps familiar with serial contracting, a term which had almost been coined in Nottinghamshire, where it was regarded as one of the greatest benefits of the new look at building because it meant competition in the initial stages from the selected tenderers through to the stage of the master bill of quantities.

In this way better prices were obtained because, having allowed people to tender, they said, 'If you win the tender, you can have the whole of our programme'. Only today, at its meeting, the County Council had awarded to one firm a contract for £1,600,000 on the master bill of quantities for which they had tendered a few weeks ago.

In his opinion this gave the contractor an opportunity to exercise efficiency by using his labour force well from one site to another. The local authority received better service and a better finished article. What was perhaps a little startling was that they knew at this moment that their 1961–62 building programme for schools was within, and would remain within, the Minister's ceiling cost limits, and that before a brick was taken on to the site.

CLASP was the recognition by a number of local authorities that, while large, they were not large enough as single entities to get the best value for money or to do the development work satisfactorily, the latter being one of the most important factors in the organisation. They were now setting aside one-quarter of 1 per cent and were finding difficulty in spending it because of the need of the right people to do the development work. CLASP, which had no standing orders and was controlled by one meeting a year of its members, with meetings at regular intervals of the technical officers, had produced schools and other buildings of architectural beauty, well within the ceiling cost limits of the Minister of Education.

He believed that local government, with its resources and needs, could provide an opportunity for members of the Institute which, if grasped, would enable them to produce in the second half of the 20th-century architecture comparable with the greatest period of the past.

DISCUSSION

Mr A. W. Cleeve Barr [*F*] (Chief Architect, Ministry of Housing and Local Government), taking up Mrs Layton's reference to a cost yardstick, said that his Ministry's development group had evolved a reasonably satisfactory one for medium to high density mixed development housing in terms of cost per person housed.

One essential of a useful yardstick for the designer was that it should be in such terms as to admit of more than one solution. A cost yardstick could be a useful design tool in terms of cost per pupil or per person housed in the case of school buildings or large-scale housing, but it would be difficult to publish any yardstick for single houses or small groups of houses at low density which would not automatically become standard prices per house. He invited any suggestions on how this could be done in terms other than cost per foot super or cost per house of a given size. His Ministry was keen to discuss schemes with architects at the earliest possible design stage, and at that stage was ready to discuss appropriate cost yardsticks for particular schemes.

Turning to negotiated contracts, he said there were more of these in housing than in any other type of local government building. To advise on cost targets of this kind placed a heavy responsibility on the Ministry staff, but they were ready to accept this if the local authorities wished.

He agreed with Mrs Layton that a development group could be of the greatest value in housing, as in education, in stimulating new ideas, both in design and in building techniques. Such a group could also show by specific examples what standards and quality of building could be achieved at different levels of cost.

Mr Cleeve Barr asked the meeting to imagine what the educational system would be like if schools were built by 1,500 district councils throughout the country, if there were no expertise of the order of the inspectorate at the Ministry of Education, and if half the cost of schools was found by parents taking their weekly rent to the local councils. This was the situation in housing. It gave perhaps some idea of the complexity of housing and of the differences between it and education.

It would be misleading to try to draw too many parallels between education and housing because the methods of finance, the means of assessing standards and the technical requirements were different. There was a statutory advisory committee which advised the Minister on housing standards and, in a sense, this was one of the most impressive examples of the functioning of democracy. A report by this committee, which had taken two years to prepare, would be published later in November and would undoubtedly prove to be one of the most serious and important contributions to the subject since the war.

The work of the development group at the Ministry of Housing and Local Government was entirely complementary to the work of this advisory committee. Its programme included building projects for (1) a group of old persons' flatlets at Stevenage New Town; (2) a group of family houses [to the new standards of the advisory committee]; (3) another group of houses using '5 module CLASP' or, as some members of the group called it, 'miniclasp', a

prefabricated system of construction; (4) a slum clearance project for a northern industrial city, concentrating particularly on the problems of family life in multi-storey flats, car parking, and so on.

Additionally, bulletins on designing for old people, on the landscaping and treatment of the space about flats, on swimming baths, on technical services – lifts, plumbing, and so on – were either at or on their way to H.M. Stationery Office.

Mr K. J. Pearce (National Federation of Building Trade Employers) said he shared Mrs Layton's desire to let fresh air into all sections of the building industry, but he did not agree that it was bogged down, because many people were far from being complacent and satisfied with the present state of things. At the same time he pointed out that those who had visited America recently had returned with the definite impression that the building industry as a whole in this country was as efficient as the American and in some aspects well in advance of it.

He agreed that local authorities should have some knowledge of the programme they could undertake, because too often those in the building industry were called upon at far too short notice and could not plan as they would like. There was also wasted effort from the postponing of projects, on which preliminary work had been done, for one or two years.

He emphasised that money must not be frittered away through research on testing materials and building methods already carried out efficiently by the Building Research Station.

The attitude of builders to chief and private architects was 'Let them all come', and all they asked was that the architects should be efficient and would co-operate in order to get on with the job.

On Mrs Layton's reference to the gulf between architects and builders, he pointed out that builders had to be practical because in the main they took the risks. Often they received a scheme which had been in the architect's office for two years and in the quantity surveyor's office for two months and they were expected to deal with it in two weeks. In that time they had to assess the cost of a job and all the risks to be taken in connection with it. They must be excused, therefore, for taking notice of the habits or peculiarities of certain architects.

One thing which would get the co-operation of the building industry more than anything else was the close observance of the recommendations in that excellent publication 'The Code of Procedure for Selective Tendering'. Evidence of the desire of the building industry to play its part was shown by the fact that in the last year about 10 per cent more work had been carried out by practically the same labour force.

Mr Clifford Culpin, OBE *[F]*, said he was fortunate enough to be one of the steering committee which expressed varied opinions during Mrs Layton's production of her book *Building by Local Authorities* and he represented the private architect. He disagreed with some other members of that committee on the place of the private architect in this work, his reliability and the contribution he had made. He found it hard to believe that a large number of local authorities had suffered such bad experiences with private architects that they were heard muttering 'Never again' – certainly he had not met with this disillusionment in his experience with them.

However, private architects often had real reason to be critical of the councils employing them. He himself was once threatened with apoplexy on the steering committee when a former chairman claimed it to be desirable that the architect should not know the quantity surveyor, so that the latter could, in the client's interests, carefully watch the architect and check up on him. This was an appalling evaluation of the architect's integrity.

Mrs Layton had pointed out that the private architect enjoyed freedom. In this connection he recollected that once he had gathered up his plans and papers and said, 'It is clear, Mr Chairman, that you and I talk a different language' – and had then walked out. Of course he was called back and the job was done in his way, to the benefit of the ratepayers, he believed. The official architect, however bold, could not possibly assert his views in this way. Often he was not even a chief officer in his own right and might not get a chance to speak at all.

While the private architect had not the scope or continuity of work to introduce new conceptions of building, such as the CLASP experiment – he probably thought that elementary billing was something to be followed by comprehensive cooing – he could stir, or even fire a committee's imagination.

Mr Culpin stressed the need for the local authority to brief the private architect adequately and early, which was seldom done. Lack of foresight and of long-term planning meant so often the engagement of the private practitioner on the crude basis of 'You can have the job if you're out to tender by Christmas'. This meant a panic, redeployment of staff, and the utmost personal effort on the part of the principals to produce even a workmanlike job. Really first-class architecture could never be achieved under those conditions.

In many larger authorities the private architect had no contact with the client committee but dealt with the official architect as a go-between. This probably saved time but prevented the client–architect relationship so strongly advocated by the Institute, and for sacrificing this contact the private architect was often charged ½ per cent.

Bernard Shaw said that councillors ought to pass a qualifying examination. Whatever people thought about his alphabet, on that occasion he was probably right. For a start, no better textbook than Elizabeth Layton's wise and eminently readable volume could be recommended.

Mr L. J. Fowler (Weatherfoil Heating Systems Ltd), speaking as the champion of the forgotten man, the sub-contractor, declared his interest in heating, ventilating and air conditioning which were an increasing proportion of the ingredients of a building.

Progress in heating and air conditioning, in his view, flowed from negotiated contracts, which came into being after the war, some of which were private, others government.

He thought that the development side was important and believed that development in school building could be applied to housing and to hospitals. He pointed out that labour costs had risen by 32 per cent since 1 April 1958, and thought that more work must be done on the services in the factory.

Mr P. A. Denison (Cape Building Products Ltd), taking issue with Mr Pearce, said they could not rely purely on the Building Research Station. The only way to catch up on housing programmes was by technical achievement.

Mrs Layton had said she would wish to see all local authorities undertaking original development work jointly rather than individually, but he was afraid that many local authorities might seize upon the chance of running experimental development contracts. He doubted if the opportunity to experiment was the cure for frustration, and there was the danger of seeking innovation for innovation's sake and of dissipating the resources available for this work.

Mr W. E. Tatton Brown *[A]* (Chief Architect, Ministry of Health) said that in listening to Mrs Layton's valuable paper he was reminded of the fairy prince displaying the glass slipper to the ugly sisters – the ugly sisters being those government departments which had not yet conformed to her tight specification. He had no doubt that some members present had come with the intention of seeing how well or how badly the shoe fitted. The Cinderella of this performance, they might be surprised to learn, was the Ministry of Health, which was discussing new procedures with the local authority associations for carrying out the steps suggested in Mrs Layton's paper.

The aim of the new procedures was to apply to building work the Government policy of relaxation of control over local authority functions while at the same time ensuring that (1) the Minister carried out his statutory responsibilities for the health and welfare services and at the same time the tax-payer got value for money, and (2) no undue burden was thrown on the economic resources of the country. Building Notes have been drawn up which recommend space standards for various types of new buildings such as old people's homes, maternity and child welfare clinics, training centres and so on and each type of building has been given a cost limit on similar lines to those already operated by the Ministry of Education. Between minimum standards and maximum cost, the architect should have considerable room for manœuvre. The cost limits have been based on studies of a considerable number of health and welfare buildings built in recent years and the scales of accommodation are based on those which are known to work satisfactorily.

The cost limits have been broken down under four headings:

1. Basic accommodation – common to all building of a particular type.
2. Additional accommodation – spaces specially required for a particular job.
3. External works, and
4. Abnormals such as peculiar site conditions requiring special foundations, etc.

The Minister intended to ask authorities to provide programmes for their health and welfare services and submit applications for cost limits for individual schemes a considerable period in advance of building. These applications would be accompanied by a broad statement of the need for each scheme which would enable him to assess priorities. The Minister would then inform the authorities which schemes were likely to get loan sanction and when – as far as three or four years ahead. The architect could then go ahead and prepare plans and invite tenders and no further reference would be required beyond a certificate from the authority when they applied for loan sanction to the effect that the scheme was designed to the standards laid down in the Building Notes and that it was within the agreed cost limits.

If the schemes exceeded the cost limits the procedure would be similar to that carried out for the Ministry of Education and great care had been taken to see that the form of breakdown of the cost analysis should be similar for the two departments.

He hoped, therefore, that they would be able to look forward to a happy union with Mrs Layton's mythical fairy prince, the local authority architect.

Sir William Holford [*President*] referring to the reluctance of local authorities to sanction capital expenditure and thereby perhaps increasing the maintenance cost of their buildings, said he thought this was due to the old argument about how much today would pay for tomorrow. Many times he had pointed out that a little more initial expenditure would save a great deal of maintenance, and although the response would be sympathetic, there was always the argument, 'Well you know, there is a limit to what we can pay now', whereas local authorities should take a total view of the job and think in terms of 40, 60 or 80 years.

He did not agree with Mr Pearce that the builder took all the risk; his subcontractor took a great deal and, in the end, the client took most.

Mrs Layton had said she did not have much faith in development work outside government departments. He did not altogether agree. It was true that in the case of local authorities the most useful type was user research rather than development group work and, as Mr Denison had said, there might be considerable duplication. Other people could do development work; for instance, the big suppliers such as ICI and Levers, and bodies like the Central Electricity Generating Board, which was considering setting up its own development group and which spent £400 million a year on construction.

Thanking Mrs Layton on behalf of the Institute, he recalled that 11 years ago she gave a talk to the Housing Centre entitled 'The Economics of Housing', which was reprinted in the *Town Planning Review* in April 1951. Although there were strong criticisms of the social premises it adopted, ten years later the policy she had advocated was adopted to a large extent. Although some people might regret certain features of that policy – particularly in regard to the appalling plight of certain less fortunate members of the community, such as the homeless in London – it was true that there had been a new look at housing policy as a result of her preliminary thinking. Now they were at the point where they had to take a new look at the whole subject of local authority building, and Mrs Layton's able talk might have pointed the way to the next milestone.

The vote of thanks was carried by acclamation.

Mrs Layton, replying to the Discussion, said that, as she had hoped, it had stirred up a lot of thought, and she agreed heartily with much of what had been said.

She had been fascinated by Sir William Holford's reference to her previous talk because she had no idea that it had aroused any controversy. She confessed that today she might not subscribe to some of the things she had said then.

She had been delighted to hear from Mr Cleeve Barr and Mr Tatton Brown what their respective Ministries were doing.

Mr Pearce had mentioned the problem of the builder having to do in a fortnight what the architect had taken two years and the quantity surveyor two months to do. What she was advocating in the negotiated contract was that the builder should have all the time available from the beginning of the scheme, since the way to get really constructive, economical work was to bring in all the know-how of the builder at the beginning.

She could not add anything to what Mr Culpin had said as he had made his points so much better than she could have done. She had been impressed by what Mr Fowler had said in support of the negotiated contract, which confirmed her own advocacy of its use. She was pleased to have the support of a sub-contractor and apologised for not having mentioned subcontractors specifically.

She welcomed the challenge in the doubts expressed by Mr Denison of the value of more development work by local authorities. She could well imagine subcontractors who worked for many architects being bogged down by demands for their co-operation from many sides. However, working with the architect from the beginning was unusual for the small or middle-sized builder. Although there might be pressure on the specialist contractors, many local builders would benefit greatly from a certain amount of education in this respect.

She entirely agreed with Sir William's remarks on the problem of maintenance costs and capital costs, on which a great deal of work should be done.

She concluded by thanking members for their generous welcome to her paper and for their lively response, which augured well for the development of those ideas in future.

The Chairman said he hoped all who had listened to Mrs Layton would study her book; which could not have been produced at a more appropriate moment. He was convinced that for the next decade at least the most important task for those engaged in local authority building would be to design for greater and more efficient production. He hoped that all would accept her challenge and would get on with their response.

A number of written contributions to the Discussion have been received. For reasons of space these have been held over until next month.

Notes and Notices

NOTICES

Third Ordinary General Meeting, Tuesday 12 December 1961 at 6 pm. The Third Ordinary General Meeting of the Session 1961–62 will be held on Tuesday 12 December 1961 at 6 pm. Mr J. P. Eddy, QC, will read a paper on 'Professional Responsibility'.

(Light refreshments will be provided before the meeting.)

Fourth Ordinary General Meeting, Tuesday 9 January 1962 at 6 pm. The Fourth Ordinary General Meeting of the Session 1961–62 will be held on Tuesday 9 January 1962 at 6 pm for the following purposes.

To read the Council's Deed of Award of Prizes and Scholarships, 1962.

Discussion: there will be a discussion on 'The Architect's Responsibility for the Design of Building Components'.

(Light refreshments will be provided before the meeting.)

Session 1961–62. Special General Meeting. At a Special General Meeting held on Tuesday 7 November 1961 at 6 pm, Mr J. Lewis Womersley, MTPI, Vice-President, in the Chair.

The meeting was attended by about fifty members.

The Chairman stated that the meeting had been called to approve further revisions of Bye-laws 42, 43, 47, 56, 58, 59 and 60, and an addition to Bye-law 36, to be renumbered 36(B), a full explanation of the principles involved and a complete draft of these Bye-laws having been published in the RIBA JOURNAL for October 1961, pages 461 and 462, sent out to all members.

Mr Donald E. E. Gibson, CBE, DCL, MA, MTPI, the Honorary Secretary, then moved the following Resolution:

'That subject to the approval thereof by the Lords of Her Majesty's Most Honourably Privy Council, the draft of Bye-laws 36(B), 42, 43, 47, 56, 58, 59 and 60, as issued with the notice calling this meeting, be approved and adopted by the Royal Institute.'

A copy of the draft was laid on the table and is appended to these minutes.

The Resolution having been moved by Mr Gibson, and seconded by Mr Hubert Bennett, the Honorary Treasurer, was put to the vote of the meeting and was passed unanimously.

The Chairman announced that a Special General Meeting to confirm this Resolution would be held on Tuesday 28 November 1961 at 6 pm.

The proceedings closed at 6.7 pm.

Session 1961–62. Special General Meeting. At a Special General Meeting held on Tuesday 28 November 1961 at 6 pm, Mr Frederick Gibberd, CBE, ARA, MTPI, Vice-President, in the Chair.

The meeting was attended by over one hundred members.

The Chairman stated that the meeting had been called for the purpose of confirming the resolution passed at the Special General Meeting held on Tuesday 7 November 1961, approving the adoption of the revised Bye-laws 36(B), 42, 43, 47, 56, 58, 59 and 60 the full text of which was published in the RIBA JOURNAL for October 1961.

Mr Donald E. E. Gibson, CBE, DCL, MA, MTPI, the Honorary Secretary, then moved the following resolution passed at the Special General Meeting held on Tuesday 7 November 1961, be confirmed:

'That subject to the approval thereof by the Lords of Her Majesty's Most Honourable Privy Council, the draft of Bye-laws 36(B), 42, 43, 47, 56, 58, 59 and 60, be approved and adopted by the Royal Institute.'

The resolution, having been moved by Mr Gibson, and seconded by Mr A. W. Cleeve Barr [*F*], was put to the vote of the meeting and was passed unanimously.

The proceedings closed at 6.11 pm.

Annual Subscriptions and Contributions. Members' subscriptions and Students' contributions for 1962 become due on 1 January.

	£	s.	d.
Fellows	12	12	0
Associates	7	17	6
Licentiates	7	17	6
Students	2	2	0

For members resident overseas:

	£	s.	d.
Fellows	8	8	0
Associates	6	6	0
Licentiates	6	6	0
Students	2	2	0

The Cheques Act 1957. The Cheques Act which came into operation on 17 October 1957 states that 'an unendorsed cheque which appears to have been paid by the banker on whom it is drawn is evidence of the receipt by the payee of the sum payable by the cheque'. The implication of this is that for payments made by cheque the issue of separate receipts is not necessary.

Members are therefore notified that in future receipts will not be sent for subscriptions paid by cheque, unless for any special reason a receipt is asked for.

As an additional precaution members sending cheques are advised to cross them 'A/C Payee only'.

The RIBA Appointments Department. Members and Students of the RIBA and the Allied Societies are reminded that the services of the Institute's Appointments Department are available to employers requiring assistants and to assistants seeking salaried employment.

Employers are invited to notify the Secretary of vacancies in their offices, giving details of the work to be done, the qualifications required and salaries offered.

Assistants should preferably call at the offices of the Appointments Department, but if this is not practicable they should obtain from the Secretary an application form, which when completed and returned to the Institute will enable the Department either to send the applicants particulars of vacancies suitable to their qualifications and requirements or submit their names for vacant posts.

Members and Students seeking official appointments should note that normally these are fully advertised in the weekly professional press, and that therefore the Appointments Department do not as a rule notify them to those on the register.

The Institute will also be glad to advise on most matters concerning architectural employment, including overseas appointments.

British Architects' Conference 1962. The British Architects' Conference 1962 will be held at Coventry from 10 to 13 July, at the invitation of the Birmingham and Five Counties Architectural Association. Full details of the programme will be published in due course. Particulars of accommodation in hotels will be published in an early issue of the JOURNAL.

RIBA Award for Distinction in Town Planning. The RIBA Award for Distinction in Town Planning, which is the only award in town and country planning bestowed by the RIBA, is by conferment only and is limited to Fellows, Associates and Licentiates of the RIBA. Outstanding work in the design and layout not only of individual buildings, but of groups of buildings, is recognised. The Award is made for actual planning work, and while not primarily intended for housing layouts, such layouts of groups of buildings are not excluded.

Recommendations are submitted to the Council by a Standing Committee set up for the purpose. Personal applications by candidates are not entertained; the name of a candidate must be submitted by three or more sponsors, themselves members of the RIBA, who are required to submit details of the candidate's professional qualifications and experience and evidence of the candidate's actual planning work. Nominations may be made twice annually, on 1 March and 1 November, and must be addressed to the Secretary, RIBA, 66 Portland Place, London, W1.

Members upon whom the Award has been conferred are entitled to use the designation 'RIBA Award for Distinction in Town Planning', and it is advised that this should be used in full, or the affix 'Dist. TP' used after the initials 'FRIBA', 'ARIBA' or 'LRIBA', according to the class of membership.

Members' Club Facilities. A Members' Luncheon Room is open on the sixth floor, run on a largely self-service basis. The price of luncheon for members and Students is 4*s*. and guests may be introduced. The luncheon service is available between 12 noon and 2 pm. Luncheon vouchers issued through Luncheon Vouchers Limited will be accepted, as also will any vouchers issued privately by members in private practice to members or Students in their employment, if prior notice is given to the Catering Manager.

There is a Members' Club Room and Bar on the second floor. The room is open from 10 am to 7 pm.

Morning coffee can be served between 11 am and 2.30 pm, and afternoon tea between 3.30 pm and 7 pm. The bar is open to members and Students from 12 noon to 2.30 pm and from 3.30 pm to 7 pm. As an alternative to the luncheon room service, sandwiches may be obtained at the Members' Bar during the lunch hour.

The various facilities described are not available on Saturdays or Sundays.

Forms of Agreement between Architect and Client – price 12*s.* per dozen post free. Revised forms of Agreement between architect and clients have been published and are now available from the Publications Office. Full details were given in the November issue of the JOURNAL (page 501). A complete list of the Institute's publications is obtainable from the Publications Office, who maintain a mailing list for those members who would like to be notified about new publications, etc.

Kalendar 1961–62: Corrections

It is regretted that the following seven members who were elected Fellows RIBA on the dates shown below, appear under their previous class of membership in the new edition of the Kalendar:

Page 85	F 1960 A 1935	Dickinson: Cyril Pollard, AA DIPL. (5471)
Page 135	F 1961 A 1949	Key: Peter Stuart (5520)
Page 154	F 1960 A 1949	Masters: Peter Henry (5486)
Page 156	F 1961 A 1952	Merer: Stanley Peter Charles, DIPL. ARCH. (Northern Polytechnic) (5512)
Page 182	F 1960 A 1940	Renton: Andrew, DA (Edin.) (5475)
Page 194	F 1961 L 1931	Shea: Francis Matthew (5495)
Page 224	F 1960 A 1940	Wharfe: Harold, DIPL. ARCH., DIPL. TP (Leeds), AMTPI (5476)

On page 67 the title of the firm against the name of Mr Francis Milton Cashmore [*F*] (3562) should read Messrs Joseph, F. Milton Cashmore and Partners.

On page 81 the address and telephone number of Mr Peter Brian Davenport, DIP. ARCH. (Manchester) [*A*] (11237), should read 34 Market Street, Hyde, Cheshire (Hyde 3064).

On page 86 the address of Mr Colin Dixon [*A*] (6500) should read Penlee, Cavendish Road, Weybridge, Surrey, and the address of Mr Colm Brian Dixon [*A*] (21854) should read 62 Merrion Square South, Dublin 2.

On page 91 the address of Miss Blanche Stella Eley, DIP. ARCH. (Leics.) [*A*] (12345), should read 4 Woodgrange Court, Woodgrange Close, Kenton, Middlesex.

On page 121 the telephone number of Mr Ian Richard Hodgson [*A*] (17954) should read Speedwell 6048.

On page 142 the telephone number of Mr Vivian Levett [*A*] (14376) should read Aylesbury 3425.

On page 149 the date of election and address of Mr Samuel Ian Dickson McKee, DA(Edin.) [*A*] (21201), should read 1960 33 Stormont Park, Knock, Belfast 4, Northern Ireland (Dundonald 3274).

On page 231 the particulars against the name of Mr Alfred Arden Wood [*A*] (14677) should read: TD, DIPL. ARCH. DIPL. TP (Leeds), AMTPI, Arncliffe, Parkside Road, Meanwood Park, Leeds 6, Yorks (Leeds 58536).

On page 264 the address of Mr George Brian Price [*Student*] should read Treetops, 20 Underdown Avenue, Widley, Portsmouth, Hants. The address of Mr John Samuel Price [*Student*] should read 36 Dingle Avenue, Cradley Heath, Staffordshire.

BOARD OF ARCHITECTURAL EDUCATION

RIBA Examination for Candidates for the Office of Building Surveyor under Local Authorities. At the RIBA Examination for candidates for the Office of Building Surveyor under Local Authorities, held on 4, 5 and 6 October 1961, ten candidates presented themselves, and the following were successful: Edwin Howard, L. G. Long, K. J. Mullins, G. B. Rogerson and John Standring.

Competitions

Copies of the conditions of competitions are deposited in the RIBA Library and are available for inspection.

Note. An applicant for the conditions of a competition must state his registration number.

The University of Liverpool: Halls of Residence. Architects are invited to submit designs for halls of residence for 1,100 to 1,200 students on the Carnatic site at Mossley Hill, Liverpool. The cost of the works will be approximately £1,500,000.

Assessors: Sir James Mountford, MA, DLITT., DCL, LLD (Vice-Chancellor); Mr Donald Gibson, CBE, MA, DCL [*F*]; Professor Myles Wright, MA, MTPI [*F*].

Premiums: £5,000; £3,000; £1,000. Further premiums, to a total not exceeding £2,000, may be awarded at the discretion of the Assessors for other designs of merit.

Last day for submitting designs: 4 September 1962.

Last day for questions: 1 January 1962.

Conditions may be obtained, upon receipt of a deposit of £3, from The Registrar, The University of Liverpool, Liverpool 3.

Ideal Home/RIBA Group Housing Competition. Architects are invited to submit designs suitable for developing either or both of two sites, each of just over 4½ acres, at Harlow, Essex, and Stockport, Cheshire. This includes both the layout of the sites and the design of the dwelling to be built on them.

Assessors: Sir Basil Spence, OBE, TD, RA, ARSA, RDI, PPRIBA; Mr Donald Gibson, CBE, MA, DCL [*F*]; and Mr G. Grenfell Baines, OBE [*F*].

Premiums for each site: £1,000, £350, £200 and six special awards of £50. The premiums will be in addition to the fees paid to the authors of the winning designs.

Last day for submitting designs: 2 January 1962.

Conditions may be obtained on application to Ideal Home Magazine, Design Competition Office, 5th Floor, 96 Long Acre, London, WC2.

New County Offices, Reading. Last day for submitting designs: 5.30 pm on 5 June 1962. Last day for questions: 22 January 1962. Full particulars were published in the JOURNAL for October, page 463.

City of Johannesburg, Republic of South Africa. Competition for Initial Group of Buildings and Site Layout: Civic Centre. Closing date for the dispatch or handing in of designs is provisionally 8 June 1962. Full particulars were published in the JOURNAL for August, page 389.

'Arborite' Design Competition. Last day for submitting designs: 10 January 1962. Particulars were published in the JOURNAL for September, page 427.

Allied Societies

Changes of Officers and Addresses

Devon and Cornwall Society of Architects. Cornwall Branch. Chairman, H. G. Phillips, BARCH. [*A*].

Essex, Cambridge and Hertfordshire Society of Architects. Southend-on-Sea District Chapter. Hon. Secretary, K. C. Cheeseman [*A*], 861B London Road, Westcliff-on-Sea, Essex.

West Yorkshire Society of Architects. The address of the headquarters of the Society has been changed to Hillary Chambers, Hillary Place, Leeds 2 (Leeds 26250).

The Buckinghamshire Society of Architects: *Awards for Craftsmanship.* The Society has decided to inaugurate awards for craftsmanship for buildings erected in Buckinghamshire. These awards, which will be in the form of engraved certificates, will be for two classes: (*a*) complete buildings; (*b*) individual pieces of craftsmanship. It is intended that the first awards should be made in 1962 for works completed within the five years prior to 31 December 1960.

Nomination forms can be obtained from the Hon. Secretary of the Society, Mr I. D. H. Preston [*Student*], Deepmill Lane, Great Missenden, Bucks.

General Notes

The Future of Lincoln. For some considerable time the Lincoln Branch of the Nottingham, Derby and Lincoln Society of Architects have been greatly concerned about the complete lack of direction in the development of the City of Lincoln. It is obvious to the branch that no properly considered comprehensive planning has been carried out, and with the opportunities that exist for truly imaginative planning, the total disregard displayed by the planning authority is tragic.

The branch take the view that planning within the City of Lincoln, which is essentially of an urban, three dimensional and visual character, can best be undertaken by an architect/planner. A campaign is being launched with the purpose of influencing public opinion in this direction.

Several thousand copies of an illustrated pamphlet have been distributed. A booklet is also available for those people seeking further information.

Trade and Technical Literature Competition 1962. This competition is sponsored jointly by the RIBA and The Building Centre. The jury nominated by the President, RIBA, consists of Mr G. Grenfell Baines, OBE, MTPI [*F*], Mr Andrew Derbyshire [*A*], Mr Roger T. Walters, AMISTRUCT.E [*A*] and Mr Bryan Westwood, AADIPL. [*F*].

Conditions can be obtained from The Building Centre, 26 Store Street, London, WC1, and entries must be received by noon on 30 April 1962.

Building Centre Post-Graduate Travelling Scholarships. The Building Centre has announced a scheme of post-graduate travelling scholarships. They are for qualified architects, structural engineers, quantity surveyors, builders or others who have been engaged in building for not less than two years or who are teachers of architecture or building, or who are engaged in building research. Two scholarships of £250 each are to be awarded annually to two persons, not necessarily of the same section of the building industry, who undertake to travel abroad together for not less than one month and to study jointly developments in materials and equipment used in building and processes of building in foreign countries.

An unusual feature of the scholarships is that the joint report to be submitted by scholars on their return can be in a form suitable to make a Building Centre Recorded Technical Talk. These talks are on gramophone records, accompanied by a film strip and are made available, without charge, to societies and schools of architecture, surveying and building. Thus the scholars will, in effect, be reporting their findings to large sections of the building industry. It is intended that the conditions of qualification and experience in the scholars shall result in the selection of persons who have the necessary background knowledge to assess the value to British building of the things they have seen.

The scholarships will be controlled by a jury of assessors representing all sections of the building industry. They are Mr Howard V. Lobb, CBE, AISTRUCT.E [*F*], Mr G. L. Coates, FRICS, Mr R. T. James, OBE, MICE, Mr Norman Longley, CBE, FIOB, and Mr F. R. Yerbury, OBE [*Hon. A*], Director of the Building Centre. The secretary to the jury will be Mr E. L. Bird, MBE, MC [*A*], Technical Research and Education Officer of the Building Centre.

Applications for the 1962 Scholarships have to be received before 1 January 1962. Copies of the Conditions of Competition and entry forms can be obtained from the Director, The Building Centre, 26 Store Street, London, WC1.

York Institute of Advanced Architectural Studies. Dr P. J. Nuttgens, MA, DA (Edin.) [*A*] has been appointed Director of the Institute from 1 January 1962. Mr G. H. Broadbent, BA(ARCH.) (Manchester) [*A*], has been appointed Secretary, as from 6 October 1961. Mr Broadbent was a Lecturer in Architecture at the University of Manchester.

The Civic Trust Awards. These awards are made in a three-year cycle; in 1959 through the county councils; in 1960 through the cities and county boroughs; and in 1961 they will be awarded for work done in London.

Like other dynamic cities throughout the world, the face of London is ever changing. During the last few years the rate of change has accelerated enormously offering an ever more stimulating challenge to those concerned with all aspects of its design. New techniques, new materials and a new scale have all to be considered in integrating the new London with the London which has grown up in the past. It is to the successful examples of this new work that the Civic Trust Awards for 1961 will be made.

The awards for 1961 will cover schemes completed during the period 31 May 1958 to 31 May 1961 within the administrative area covered by the London County Council and within the boundaries of participating boroughs. Schemes may have been carried out by public or private enterprise but must be such that they can easily be seen by the general public. In the past two years winning entries have included buildings and groups of buildings in relation to their surroundings; landscape, parks and paved areas; street lighting schemes; roads, car parks and bridges; restoration of historic buildings; kiosks, bus shelters, filling stations and the removal of overhead wires and other eyesores.

Two classes of entry are invited:

Class I: New buildings in the design of which respect has been paid to the character of the neighbouring buildings and natural surroundings.

Class II: Schemes of other kinds for improving the appearance of the urban scene.

Independent assessors will be appointed by the Civic Trust on the advice of the President of the Royal Institute of British Architects. There will be one award in each class in each metropolitan borough. Assessors will be authorised to withhold the awards should they consider that submissions are not sufficiently worthy of public recognition but certificates of commendation may be given in addition to, or instead of, an award at the assessor's discretion.

Entries have to be submitted to the appropriate Town Hall, from which entry forms may be obtained, not later than 31 December 1961.

Further information from the Civic Trust, 79 Buckingham Palace Road, London, SW1 (Tate Gallery 0891).

The R. S. Reynolds Memorial Award 1962. Nominations are now being received for the above Award. It is conferred annually on an architect who, in the judgement of his profession, has designed a significant work of architecture, in the creation of which aluminium has been an important contributing factor.

Preference is given to work completed during the three years prior to 1 January 1962, but the Jury, at its discretion, may acknowledge earlier work in selecting Award recipients.

An entry may be one structure or a related group of structures forming a single project.

Nomination forms must be sent to the organisers by 18 December 1961. These forms may be obtained from The Secretary, United Kingdom Committee of the IUA, 66 Portland Place, London, W1.

The Award is organised by The American Institute of Architects, at 1735 New York Avenue, NW, Washington 6, DC.

Michael Ventris Memorial Fund Awards. The Michael Ventris Memorial Fund was founded in 1957 in memory of the late Michael Ventris by his friends, in appreciation of his work in the fields of Mycenaean civilisation and of architecture.

The objects of the fund are:

(*a*) To promote the study of Mycenaean civilisation or kindred subjects by awards or studentships to students of postgraduate status or other comparable level of achievement.

(*b*) To promote the study of architecture by awards or studentships to architects or students of RIBA Intermediate status or other comparable level of achievement.

The awards will be open to applicants from all countries.

The awards will be made by an Advisory Committee appointed by the Institute of Classical Studies and the Architectural Association acting jointly.

The first award in 1958–59 was for Mycenaean studies, in 1959–60 for architecture. The awards are normally offered in alternate sessions for each subject.

On completion of their work, the successful candidates must be prepared to give evidence to the Advisory Committee of the study which the award has enabled them to carry out.

It is proposed to make the award for 1961–62 in the spring of 1962 for Architecture if a suitable applicant comes forward. The award will ordinarily amount to £100. Payment will be in one single sum on 1 March.

Applications should be addressed to the Secretary, Architectural Association, 34–36 Bedford Square, London, WC1, not later than 1 February 1962. Applicants should give particulars of their age, qualifications, academic record or other evidence in support of their application, together with the names of two referees, and should outline the work they intend to pursue in the event of the Award being made to them. Applicants may be asked to attend an interview.

Commission for the New Towns. Mr B. J. Collins, CBE, County Planning Officer of Middlesex, has been appointed Secretary to the Commission for the New Towns.

Mr E. E. H. Cage, Chief Executive of Crawley Development Corporation, has been appointed Finance Officer to the Commission.

Association Football. RIBA *v.* RICS, match played at the sports field of the South West Essex Technical College on Wednesday 8 November. Result: RIBA 7 (R. Littlejohn 3, G. Weatherley 3, one own goal), RICS 2 (M. Newton 2).

The newly-formed RIBA side showed excellent form in their first match, playing as a team rather than a collection of individuals who had never met before the game. The standard of football produced was at times very good indeed, but although the RICS played gallantly throughout they could not hold players of the calibre of Littlejohn and Weatherley who each scored a hat trick.

Afterwards both teams returned to the RIBA for beer and sandwiches.

As a result of this very successful debut, it has been decided to play a return match, and probably make this an annual fixture. Any member who is interested in playing should contact Mr Roy Littlejohn [*A*], 'Four Seasons', Wood Lane, Bear Wood, Bournemouth, Hants.

The RIBA Golfing Society. The Society held its Autumn meeting at St George's Hill Golf Club on 26 October. The Selby Bowl was won by Mr Victor Farrier [*A*] with a net score of 72, and the runner-up was Mr D. White with a net score of 75. In the afternoon the Emberton Trophy for foursomes was won by Mr R. Duncan Scott [*F*] and Mr R. Shannon [*A*] with 35 points, who won on the last nine holes from Mr A. Tyler and Mr C. Tucker also with 35 points.

During the evening the society held its Annual General Meeting, and the Secretary, Mr S. H. Statham [*F*], announced that owing to ill health Mr St John Harrison [*F*] had resigned the Presidency of the Society. The meeting accepted this resignation with the greatest regret, and wished him a speedy recovery. The meeting then went on to elect Mr R. Duncan Scott as the new President. Mr S. Statham relinquished the Secretaryship for one year in order to be elected Captain, and Mr J. L. Barnard [*A*] undertook to act as Secretary for the year. In the absence of the Treasurer he also undertook to act as the Society's Treasurer.

All inquiries concerning membership should be addressed to Mr J. L. Barnard [*A*], Messrs L. D. Tomlinson and Partners, Quadrant Arcade, Romford, Essex.

Obituaries

Ivor S. Davies [*Retd L*] resigned 12 June 1961
died on 13 October 1961, aged 82 years.

Mr Ivor Davies, who came of an old and respected Bangor family, was one of the earliest Licentiate members to be elected – No. 22 in 1910. He served his apprenticeship with his father, who practised in Bangor. On his father's death Mr Davies took over and continued the practice for 50 years until his retirement.

He will be remembered for his additions and alterations to the C and A Hospital, University College of North Wales, and the Bangor Training College.

Mr Davies's widow, in the obituary notice, most generously stipulated that instead of the usual flowers, contributions were to be sent to the Architects' Benevolent Society.

George Alfred James Hart [*L*]
died on 9 June 1961, aged 85 years.

Mr G. D. Griffiths, Fellow of the NZIA, and Mr R. W. Taylor, Chairman of the Canterbury Branch of the NZIA, write:

'To George Hart the word "architect" meant more than his professional title, and the word "architecture" meant more than the name of his profession; the two words were to him a way of living, for as architect and architecture indicate a dedication to creating works of use and beauty, so George Hart, with enthusiasm and joyfulness, always expressed in his living a dedication to serving others and helping to create a better world.

'George Hart was born near Birmingham in 1876 and six years later came with his parents to live in Christchurch, New Zealand, where his father Alfred Henry Hart set up in practice as an architect. After completing his schooling he went to England, and worked and studied in London until he gained entry into the RIBA as a Licentiate. He worked for part of the time in the office of a Mr Cross whose son, Kenneth Cross, was to become President of the RIBA. During his Presidency, Mr Cross visited New Zealand and asked specially to see Mr Hart.

'After completing his studies in England George Hart married and returned to Christchurch. It is recorded that he attended the first NZ Conference of Architects to be held outside Wellington, when the Conference of 1912 was held in Dunedin. At that time the architects of NZ were not a fully incorporated body, but the NZ Institute of Architects Act of 1913 created the present Institute of Architects and George Hart was admitted a foundation member, as an Associate in July 1914, a Fellow in 1924, and in 1949 a Life member. He served the Canterbury Branch with enthusiasm and drive, was Honorary Secretary for some years, Chairman on several occasions and a member of the Council of the Institute for many years.

'In 1915 he was one of the founders of the Christchurch Architectural Students' Association, created to assist young men studying architecture. He worked for the benefit of the students for most of his life, and many of the prominent architects of today owe their success to his personal help and guidance. He was lecturer at the Canterbury University School of Art for 26 years.

'Mr Hart's artistic ability is exemplified by the fact that he won the awards of the Canterbury Society of Arts for Sketching in 1899 and awards at the Canterbury Jubilee Industrial Exhibition in 1900. With his partner (the late Mr Reese) he was the winner of a competition in 1919 for the design of workers' homes.

'Some of the better known buildings which he designed in the city are the Builders' Chambers in Gloucester Street, the Fountain at the intersection of High and Cashel Streets, the War Memorial in the Cathedral precincts, the Crematorium and Millers Ltd building which was built in 1936. This latter building, probably one of the most advanced buildings in NZ of its time, is a monument to George Hart's forward thinking and still serves its function admirably. He also produced in his spare time various designs for the enhancing of Cathedral Square.

'In matters of civic planning and beautifying, Mr Hart gave unstintingly of his time and talent. He was a Past President of the Beautifying Society, and frequently judged in the Garden Competitions. He was also a member of the Civic Beautification Committee of the City Council and the Metropolitan Town Planning Committee which preceded the present Regional Planning Authority.

'Mr Hart's main sporting interest was athletics, being a successful short distance runner in the '90s.

'In the passing of George Hart the City of Christchurch has lost a loyal son who served her well and the Institute of Architects has lost a loved and respected member, one of the "Fathers" of New Zealand architecture.

'He is survived by his widow, son and three daughters, his eldest son having predeceased him.'

Vasudeo Ramchandra Talvalkar [*Retd F*]
died on 18 September 1961.

Mr Talvalkar was born in Poona in 1879. He graduated as a civil engineer in 1901 and joined the Baroda State PWD where he worked on irrigation projects. His enthusiasm for architecture and building attracted the notice of the enlightened and art-loving ruler Maharajah Sayajirao Gaekwar who sent him to England in 1907 to study architecture. Mr Talvalkar, after qualifying as an Associate, returned to Baroda in 1913, and by 1919 held the dual position of Chief Architect and Chief Engineer until he retired in 1939.

His most noteworthy buildings in Baroda were the Science Institute, Kirti Mandir, Kirti Stambha and the renovation of the temple of Dwarakadheesh, Dwarka. He was also chairman of the Baroda City Improvement Trust (1920–28).

Mr Talvalkar was elected FRIBA and Fellow of the Indian Institute of Architects in 1936. In the same year, in recognition of his services to the State of Baroda, the late Maharaj Sayajirao conferred upon him the title of 'Raj Ratna' (Jewel of the King).

Mr Talvalkar was greatly interested in archaeology and the fine arts and an ardent exponent of traditional Indian architecture, a subject on which he wrote many articles. Mr Madhav G. Talwalker [*A*] writes: 'In his passing, we have not only lost a man of remarkable learning and a defender of the rich Indian traditional architecture, but also a vital guiding force to show us the way to the future.'

MEMBERSHIP

Resignation. The following resignation was recorded during October 1961: John Edward Davison [*Retd L*] (Folkestone).

Transfers to Retired Membership. The following members were transferred to Retired Membership during October 1961: Walter James Brown, OBE [*F*] (Sutton Coldfield), William Henry Gummer [*F*] (New Zealand), William James Reed [*F*] (Purley), Leo Sylvester Sullivan [*F*] (London), Arnold John Thompson, DSO, MC [*F*] (Bodmin), Herbert James Hall [*A*] (Twickenham), Tom Owen Thirtle [*A*] (Bletchingley), William Henry Golightly [*L*] (Nottingham), Major H. B. Johnstone Hogg [*L*] (Richmond, Surrey).

Notes from the Council Minutes

Meeting held on 7 November 1961

Appointment of RIBA Representative

(*a*) *RIBA Architecture Bronze Medal Award Jury; Kenya Chapter of the East Africa Institute of Architects.* Mr C. N. Paine [*A*].

Department of Architecture, The University of Edinburgh. The Council approved the recommendation that the course leading to the BA Degree in Architecture with Honours be recognised for exemption from the RIBA Final Examination, without Part III, the Examination in Professional Practice and Practical Experience, under the usual conditions, and that this recognition be made retrospective to cover the cycle of years just completed.

Membership. The following members were elected: as Associates 27.

Students. 71 Probationers were elected as Students.

Applications for Reinstatement. The following applications were approved: as Fellow: Raymond Charles Arnold [*Retd F*]; as Associates: Douglas Charles Clayton, Ian Stewart Kaye; as Licentiates: Allan Seymour Clayton, Harry Sursham.

Obituary. The Secretary reported with regret the death of the following members: Professor Donald Struan Robertson [*Hon. A*], Emin Onat [*Hon. Corr. Member*] (Turkey), Ernest Harold Allsford [*F*], Lieut.-Colonel Walter Edward Cross [*F*], Colin Minors Drewitt [*F*], John Holman [*F*], James Frederick Howes [*F*], Gordon M. West [*F*], Alexander Robert Robertson [*Retd F*], Vasudeo Ramchandra Talvalkar [*Retd F*], High Dick Falconer Boyd [*A*], Sydney Malvern Holloway [*A*], John Anthony Lawrence [*A*], Walter Edward Lowes [*A*], Mehda Ali Mirza [*A*], Henry Tatham, MC [*A*], John Cooper Ainsworth [*Retd A*], Eric Benjamin Elford [*L*], William Stanley Mayson [*L*], Osborne V. Webb [*L*], Horace John Young [*Retd L*].

By resolution of the Council the sympathy and condolences of the Royal Institute have been conveyed to their relatives.

Membership Lists

The following candidate for membership was elected on 9 May 1961.

AS FELLOW

Cyril James Cheale [*L*]. By an oversight Mr Cheale's name was not included in the published list of elections.

ELECTION: 7 NOVEMBER 1961

The following candidates for membership were elected on 7 November 1961.

AS ASSOCIATES (27)

Alexander: George Norman, DA(Edin.), Edinburgh.
Alexander: Ronald Lindsay, DA(Edin.).
Anderson: James William, DA(Edin.), Edinburgh.
Benjamin: Isaac, BArch.(Rand), Natal, South Africa.
Berry: (Miss) Margaret Wilhelmina, DA (Edin.), Edinburgh.
Bleasdale: Robert, DA(Edin.), Lytham St Annes.
Cadell: William Archibald, BA(Cantab.), Dip. Arch.(The Polytechnic), Dundee.
Care-Cottrell: Errol, Dip.Arch.(Auck. NZ), Hamilton, New Zealand.
Chambers: Justin Hilary, BArch.(L'pool).
Eastham: Richard Kevin, Dip.Arch., Dip.TP (Manchester), Manchester.
Fannen: Anthony Alphonsus, Dip.Arch.(Hammersmith).
Galloway: Brian Richard, Dipl.Arch.(Oxford), Reading.
Haffner: Christopher, BArch.(L'pool), Hong Kong.
Hickling: David Allen, Dip.Arch.(RWA), Montreal, PQ Canada.
Jarosz: Wladyslaw Tadeusz, New Malden.
Jones: Dennis Howard, Dip.Arch.(Wales), Newport, Mon.
McKee: Cyril William, BSc.(Belfast), Dip. Arch.(Abdn), Ballynahinch, Co. Down.
Michaelides: Makis, Dip.Arch.(Hammersmith).
Mitchell: James, DA(Edin.), Edinburgh.
Morrison: Robert McHardy, Dip.Arch.(Abdn), Aberdeen.
Murgatroyd: Reginald Timothy, Dip.Arch. (Hammersmith).
Padden: Owen Brian, Victoria, British Columbia, Canada.
Quantrill: Malcolm William Francis, BArch. (L'pool), MArch.(Pennsylvania).
Stewart: David Hamilton, DA(Edin.), Edinburgh.
Thorp: James Noble, Leeds.
Wade: Anthony Andrew Gowie, BArch.(Natal), BA(Oxon), Tunbridge Wells.
Wong: Jacob Kam-Yin, BArch.(Manitoba), Edmonton, Alberta, Canada.

ELECTION: 9 JANUARY 1962

An election of candidates for membership will take place on 9 January 1962. The names and addresses of the candidates found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, RIBA, not later than Saturday 16 December 1961.

The names following the applicant's address are those of his proposers.

AS ASSOCIATES (37)

Bourne: James Joseph, DA(Edin.), 79 Park Road, Chiswick, W4. Ronald Ward, Norman Royce and applying for nomination by the Council under Bye-law 3(*d*).

Byron: Edward Reynolds, Dip.Arch.(Birm.), 65 Coniston Road, Leamington Spa, Warwickshire. Arthur Ling, A. Douglas Jones, Denys Hinton.

Carden: Michael Terence, AA Dipl., 6 Prior Bolton Street, Canonbury, N1. Arthur Korn, Richard Sheppard, Geoffrey Robson.

Cummings: Malcolm Robert, BArch. (Queensland), c/o 6 Masons Yard, Duke Street, St James's, SW1. R. P. Cummings, H. J. Hitch, T. B. F. Gargett.

Daniel: Colin James, 18 Llanyravon Square, Cwmbran, Mon. Arthur Korn, Leo De Syllas, Anthony Cox.

Evans: William, Dip.Arch.(Birm.), 15 Ayre Road, Erdington, Birmingham 24. A. Douglas Jones, Denys Hinton, Herbert Jackson.

Fawcett: Robert Edward, 43 Princess Road, Regent's Park, NW1. Robert H. W. Richardson, H. H. Powell, Paul Nightingale.

Grindley: Peter Columba, Dip.Arch.(Birm.), 'Foleshill', 132 Dinerth Road, Rhos-on-Sea, Colwyn Bay, North Wales. A. Douglas Jones, Reginald Edmonds, G. Alan G. Miller.

Harbinson: James Caruth, Dipl.Arch. (Northern Polytechnic), 18 Lesley Close, Swanley, Kent. C. G. Bath, S. F. Burley, J. E. Moore.

Heath: Michael John, Dip.Arch.(Birm.), 53 Hall Green Road, Bell Green, Coventry. Arthur Ling, A. Douglas Jones, Denys Hinton.

Helsby: Gordon Schofield, BArch.(L'pool), 1 Brimstage Avenue, Bebington, Cheshire. M. G. Gilling, Prof. R. Gardner-Medwin, W. T. Harrison.

Hong: Albert Hin Kay, Dip.Arch.(Birm.), c/o Messrs J. Seymour Harris and Partners, 3–4 Greenfield Crescent, Five Ways, Birmingham 15. A. Douglas Jones, Denys Hinton, Reginald Edmonds.

Jones: Robert Alan, Dipl.Arch.(Northern Polytechnic), 38 Shaftesbury Avenue, Burslem, Stoke-on-Trent. J. R. Piggott, C. G. Bath, S. F. Burley.

Joules: David Alan, Dipl.Arch.(Northern Polytechnic), 78 Great Brays, Harlow, Essex. C. G. Bath, J. E. Moore, S. F. Burley.

Khareghat: Tehmasp Sorab, AA Dipl., 36 Ladbroke Grove, W11. Arthur Korn, Joseph Berger, A. E. Miller.

Knott: Robert Alfred Stocken, AA Dipl., 36 Wymond Street, Putney, SW15. Arthur Korn, Anthony Cox, Leo De Syllas.

Krasucki: Peter Paul, 11 Chesterford Gardens, Hampstead, NW3. R. Seifert, M. P. Floyd, Ronald Ward.

McDonald: Kenneth Urquhart, DA(Edin.), 6 Lixmount Avenue, Edinburgh 5. Alan Reiach, Peter B. Ferguson, J. Hardie Glover.

Norman: Gilbert Edwin Frank, Dipl.Arch. (Northern Polytechnic), 5 Liscombe Road, Dunstable, Bedfordshire. C. G. Bath, S. F. Burley, J. E. Moore.

Page: Joseph Mormonte, Dipl.Arch.(Northern Polytechnic), 20 Ridgeway, Wyesham, Monmouth. C. G. Bath, J. E. Moore, S. F. Burley.

Pearce: David John, Dipl.Arch.(Northern Polytechnic), c/o H. Hubbard Ford, Esq., 35 South Audley Street, W1. C. G. Bath, S. F. Burley, J. E. Moore.

Percival: Michael Jefferson, Dipl.Arch. (Northern Polytechnic), 29 Creffield Road, W5. C. G. Bath, J. E. Moore, S. F. Burley.

Preston: Ian Douglas Howard, Dip.Arch. (Nottm), Deepmill Lane, Great Missenden, Bucks. Norman Summers, F. B. Pooley, H. Werner Rosenthal.

Reed: Leslie Lionel, 88 Newlands Road, Norbury, SW16. W. Mollison, John S. Walkden and applying for nomination by the Council under Bye-law 3(*d*).

Rennie: Iain Alexander Gauld, Dip.Arch. (Abdn), Gannochy Farm, Gannochy Road, Perth. E. F. Davies, John Hardwick, K. Mathison Young.

Richardson: Alan, Dipl.Arch.(Northern Polytechnic), 13A Fairfield Road, East Croydon, Surrey. C. G. Bath, S. F. Burley, A. F. Hare.

Robertson: Francis Wedgewood Broome, 89 Castlecoole Park, Newtonbreda, Belfast 8, Northern Ireland. Applying for nomination by the Council under Bye-law 3(*d*).

Rolph: Lawrence, Dipl.Arch.(Northern Polytechnic), 3 Monument Terrace, Birtley, Co. Durham. C. G. Bath, S. F. Burley, J. E. Moore.

Ross: David Peter, DA(Edin.), 27 Leamington Terrace, Edinburgh 10. Applying for nomination by the Council under Bye-law 3(*d*).

Siddons: William Robert, AA Dipl., 11 St George's Terrace, NW1. Macfarlane Widdup Alexander Gibson, Peter Dunham.

Taylor: Ronald Alexander, Dipl.Arch. (Northern Polytechnic), 5 Threshers Place, W11. Denis Poulton, Philip G. Freeman, Clifford Culpin.

Tickell: Alan, Dipl.Arch.(Northern Polytechnic). 261 Bedonwell Road, Belvedere, Kent. C. G. Bath, J. E. Moore, Arthur Wilkinson.

Ugwu: Isaac Chukwuemeka, Dip.Arch. (Birm.). 86 Lansdown Road, West Didsbury, Manchester 20. Haydn W. Smith, W. C. Young, A. Douglas Jones.

Way: Jeffrey Charles, Dipl.Arch.(Northern Polytechnic), 32 Cockmannings Road, Orpington, Kent. Clifford Culpin, Allan Johnson, N. Seton Morris.

Whitaker: Alan Donald, Dipl.Arch.(Northern Polytechnic), Marsh House, Marsh Road, Halling, Rochester, Kent. R. Seifert, C. G. Bath, J. E. Moore.

Whittaker: Derek Ralph Allen, Dipl.Arch. (Northern Polytechnic), 11 Hayling Road, Stoke Newington, N16. C. G. Bath, J. E. Moore, S. F. Burley.

Wilson: Peter, Dip.Arch.(Sheffield), 8 Clovelly Road, Glenfield, Leicester. Prof. Stephen Welsh, Prof. John Needham, T. W. Haird.

ELECTION: 13 MARCH 1962

An election of candidates for membership will take place on 13 March 1962. The names and addresses of the overseas candidates found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, RIBA, not later than Wednesday 7 March 1962.

The names following the applicant's address are those of his proposers.

AS ASSOCIATES (3)

Greenspoon: Henry Eli, BA, BArch. (McGill), 4151 Sherbrooke Street West, Montreal 6, Quebec, Canada. Ernest Cormier and applying for nomination by the Council under Bye-law 3(*d*).

Ho-Asjoe: Frank W. Y., BArch.(Manitoba), 10–93 Eugenie Street, St Boniface, Manitoba, Canada. Applying for nomination by the Council under Bye-law 3(*d*).

Wong: Clifford Chun Fai, BArch.(McGill), 5 Hoi Ping Road, 7th Floor, Hong Kong. John C. Parkin, John B. Parkin, Prof. E. R. Arthur.

Members' Column

This column is reserved for notices of changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and personal notices other than of posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr Vincent Brown [*A*], Deputy County Architect, Herefordshire, has been appointed County Architect in succession to **Mr Wilfred Usher** [*F*] who is retiring.

Mr D. Roy Chowdhury [*A*] has resigned his appointment with the Tottenham Borough Council as a Senior Assistant Architect and has taken up a post as Architect, Ministry of Works, Government of Northern Nigeria, as from November 1961.

Mr Kenneth A. Featherstone, MARCH. [*A*] has been appointed Assistant Professor of Architecture at the University of Notre Dame, Notre Dame, Indiana, USA.

As from 4 December 1961 **Mr Alan J. Groves** [*A*] has become Assistant City Architect (Education and General) in the City Architects' Department, Sheffield. As from 1 October 1961 **Mr J. Lynn,** BA (Hons. Arch.), has become Assistant City Architect (Central Area).

Mr W. Victor Smith [*A*] has resigned his post as Deputy Borough Architect at Luton and has been appointed Borough Architect of Reading in succession to **Mr C. H. Willett** [*F*]. Mr Smith's office address is now Town Hall, Reading, Berks.

Mr Brian D. Waldock, AADIPL. [*A*], formerly of Messrs Idris Davies and Partners [*F/A*] has been appointed Lecturer in Architecture at the Royal College, Nairobi. Correspondence may be addressed either c/o Faculty of Architecture, The Royal College, PO Box 30197, Nairobi, Kenya, or PO Box 14392, Nairobi, where he will continue to practise.

Mr John A. Ware [*A*] has accepted an appointment as Director of Planning with the firm of **Messrs Sargent, Webster, Crenshaw and Folley;** architects, engineers, planners. His new address is 220 Garcia Commercial, Labra 800, Santurce, Puerto Rico, W. Indies.

PRACTICES AND PARTNERSHIPS

Mr L. Magnus Austin, MTPI, ARCA [*F*] has been joined in partnership by his son **Mr John David Adshead Austin,** DIP.ARCH. (UCL) [*A*], and in future the practice will be known as **L. Magnus Austin and Son,** with offices at 8 Parkstone Road, Poole, Dorset, and 24 High West Street, Dorchester.

Mr G. W. Banfield [*F*] and **Mr P. J. Booth** [*A*], previously practising under the name of **Ernest W. Banfield and Son,** announce that they now practise under the style of **Banfield and Booth,** as from November 1961.

Mr Parikh Harilal Bhagwanjee [*A*] has now commenced private practice at 107–2 Bazaargate Street, Fort, Bombay–1, India, where he will be pleased to receive samples and trade literature.

Mr Malcolm Cooper [*A*] has joined partnership with **Mr Norman A. Jackson,** ARICS, and they are now practising at 95 Washway Road, Sale, Cheshire, under the style of **Messrs Cooper and Jackson.**

Mr Kenneth Draper [*A*] and **Mr B. W. Fijalkowski,** ING.ARCH. [*A*] have become Associates in the firm of **Frank Rutter** [*F*], 60 Woodbridge Road, Guildford, Surrey (Guildford 60235).

Messrs Peter Dunham, Widdup and Harrison [*FF/A*] have closed their office at 14 Stephyns Chambers, Bank Court, Hemel Hempstead, Hertfordshire, as from Tuesday 3 October. From this date Mr Harrison, with his staff, have been practising from the Luton office, 2 Union Street.

Messrs C. H. Elsom and Partners [*F/A*], 10 Lower Grosvenor Place, London, SW1, announce that **Mr R. L. Nicholls** [*A*] an Associate, has been made a full partner. **Mr G. E. Latter,** BARCH., MCP [*A*], and **Mr A. F. Roberts** [*A*] have been appointed Associates of the firm. The practice will be continued under the same name.

Messrs James and Bywaters [*AA*], of 5 Bloomsbury Street, London, WC1, have opened a branch office at Oriel Chambers, 14 Water Street, Liverpool 2 (Central 0476), where they will be pleased to receive trade literature. The partner in charge of the Liverpool office is **Mr D. Le M. Brock,** BARCH., DIP. CD [*A*].

Mr Nicholas Johnston, DIP.ARCH. (Cantab.) [*A*] has started practice at 33 Holland Villas Road, London, W14 (Park 4115 and Welbeck 1118), where he will be pleased to receive trade catalogues, etc.

Messrs Bronek Katz, R. Vaughan and Partners [*F/A*] have taken **Mr Frank Dolezal,** AADIPL. [*A*] and **Mr Stanislaw Fleszar,** DIPL.ING.ARCH., as Associate partners.

Mr Keith G. Kellett [*A*], in practice at Lennards Chambers, Regent Street, Rugby, has opened an office at Lloyd's Bank Chambers, The Square, Market Harborough, Leics. (Market Harborough 3080), where he will be pleased to receive trade catalogues and literature.

Mr Maurice Meyersohn [*A*] has recently left the office of **Messrs Bronek Katz, R. Vaughan and Partners** [*F/A*] and has started private practice under the name of **Manfred Hermer and Maurice Meyersohn,** at 87 Wimpole Street, London, W1 (Welbeck 7601). Samples and trade literature will be welcome, but trade representatives should call by appointment only.

Messrs Munce and Kennedy [*AA*], architects and consulting engineers (Belfast and London) have established an office in Dublin in association with **Mr Colm Dixon** [*A*], at 62 Merrion Square South, Dublin 2 (Dublin 61361), where they will practise under the title of 'Munce and Kennedy, Chartered Architects and Consulting Engineers, in association with Colm Dixon, MRIAI [*A*]'. They will be pleased to receive trade literature at their new address.

Messrs Reavell and Cahill [*FF*] have taken **Mr Peter Oakley Clarke** [*A*] into partnership. The firm will continue to practise under the present title.

Mr John S. L. Smith [*A*] has taken into partnership **Mr Geoffrey Benjamin Roper** as from 1 November 1961. The practice will be continued under the title of **Messrs Smith and Roper** at Bath Gardens, Bakewell, Derbyshire.

Mr William Tocher [*A*] has taken into partnership his son, **Mr James Alexander Tocher** [*A*]. They will practise under the name of **William and James A. Tocher,** 58 Clarendon Road, Leeds 2 (Leeds 22831).

Messrs W. H. Watkins, Gray and Partners [*F/A*] wish to confirm that they continue to practise exactly as hitherto at 8 Colston Avenue, Bristol 1; 57 Catherine Place, London, SW1; and Princes House, Lagos, Nigeria, and the existing partners continue unchanged. The announcement in the October issue of this JOURNAL by **Mr R. Fraser Reekie** [*F*] in respect of the formerly associated partnership practising in the West Indies as **W. H. Watkins and Partners,** in no way affects the firm of **W. H. Watkins, Gray and Partners.**

CHANGES OF ADDRESS

Mr David M. Addey, AADIPL. [*A*] has changed his address to 'Gambons', Mayfield Road, Frant, Tunbridge Wells, Kent (Frant 296).

Mr Kenneth W. C. Bacon, MRAIC [*A*] has changed his address to Smith Carter Searle Associates, architects and consulting engineers, 1190 Waverley Street, Winnipeg 19, Manitoba, Canada.

Mr Paul Bird [*A*] has changed his address to 17 Symonds Lane, Linton, Cambridgeshire.

Messrs Cannon, Morgan and Rheinberg [*AA*] have moved their St Albans offices to Dolphin House, 3 Holywell Hill, St Albans, Hertfordshire (St Albans 50004).

Messrs Chaplin and Burgoine [*AA*] have changed their address to 51 Yarmouth Road, Thorpe St Andrew, Norwich, Norfolk, (NOR 39T). The address of their Luton office remains the same at 12 Regent Street, Luton.

Mr Peter Oakley Clarke [*A*] has changed his address to 'Tresant', West Acres, Alnwick, Northumberland.

Mr Charles V. Crane [*A*] has changed his address to 'Greycroft', 3 Marlborough Drive, Fulwood, Preston, Lancashire.

Mr Philip N. Crowe, DIPL.ARCH. [*A*] has changed his address to POB 551, Freetown, Sierre Leone.

Mr D. G. Everett, DIP.ARCH.(Leics.) [*A*] has changed his address to 'The Anchorage', The Fairway, off Forest Drive, Kirby Muxloe, Leicestershire.

Mr Michael G. Y. Foley [*A*] has changed his address to 25 Castle Street, Aylesbury, Buckinghamshire.

Mr George R. Fordham [*F*] has changed his address to 144 Broomfield Road, Chelmsford, Essex (Chelmsford 4987).

Mr John Francis [*A*] has changed his private address to 24 Hazell Way, Stoke Poges, Bucks.

Miss Gillian French [*A*] has changed her name and address to **Mrs W. E. McWhirter,** 16 Ferryhill Place, Aberdeen.

Messrs Gilbert Gardner and Partners [*A*] of 116 St Aldates, Oxford, have moved their offices to 21 Beaumont Street, Oxford (Oxford 42427).

Mr A. G. Keiffer [A] has changed his address to 4 Plantation Avenue, Leeds 15.

Mr Cecil Kennard, OBE [F] has retired from his position as District Surveyor for Kensington after having held office as district surveyor for 34 years, and his address is now 299 Cranbrook Road, Gants Hill, Ilford, Essex (Valentine 5704).

As from 7 November 1961 the private and office address of Mr E. P. Lambert [L] is 'Chislehurst', 22 West Allington, Bridport, Dorset (Bridport 2602).

Mr G. D. Larkin [A] has changed his address to 'Woodville', Ongar Hill, Addlestone, Weybridge, Surrey.

Mr G. C. H. Lawrie [A] has changed his address to Dene Cottage, Tower Hill, Dorking, Surrey.

Mr Rigby Lee [A] has changed his address to Cantelaude, Margaux, Gironde, France.

The present address of Mr B. H. Mabane, DIP.ARCH.(Dunelm) [A] is c/o Doxiadis Associates, PO Box 227, Tema, Ghana.

Mr John D. Maidment [L] has changed his office address to Pembroke House, 12 Broomgrove Road, Sheffield 10, Yorks (Sheffield 60069).

Mr A. B. Maskill [A] has changed his address to 'Glenholme', High Oakham Road, Mansfield, Notts.

Mr Derek Parker [A] has changed his address to 1111 Douglas Street, San Francisco, California, USA.

Mr D. H. B. Radford [A] has changed his address to 211 Bristol Road, Edgbaston, Birmingham 5 (Calthorpe 2566).

Mr S. G. Ranadive [A] has changed his address to 542 'Shravan', Road No. 13, TPS III, Bandra, Bombay 50, India.

Mr Lionel S. Rider [F] has changed his address from 20 Sea Road, to 60 Sea Road, Bexhill-on-Sea, Sussex.

Mr Jan A. Sliwa [A] has changed his private address to 41 Fernhill Road, Begbroke, Oxford.

Mr John H. Snowden [A] has changed his home address to 'Hillingford', Malthouse Lane, Kenilworth, Warwickshire (Kenilworth 386), and his office address is c/o The County Architect's Department, Shire Hall, Warwick.

Mr Neil H. Thompson [A] has changed his address to Flat 2, 99 Cremorne Road, Cremorne, Sydney, NSW, Australia.

Mr John Voelcker, AADIPL. [A] has moved to Sutton Place, Sutton Valence, near Maidstone, Kent (Sutton Valence 2184).

Mr Felix Walter [F] has moved his office from Gray's Inn to 14 Garrick Street, London, WC2 (Temple Bar 7691–2), where he will be pleased to receive trade literature.

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

Centre of Leeds. Expanding practice, good class work, requires assistant architect with a view to partnership. Progressive outlook essential, connection not necessary. Box 318, c/o Secretary, RIBA.

Associate (34) with twelve years' experience, mainly overseas, particularly hospitals, research, cost planning and development, requires a partnership or senior post leading to one. Some capital available. Box 320, c/o Secretary, RIBA.

Associate (32), school trained, excellent general education, ten years' comprehensive experience in leading private practices in England and overseas, highest references, seeks position leading to partnership in sound and progressive practice in southern England. Some capital available. Box 321, c/o Secretary, RIBA.

The Royal Institute of British Architects, as a body, is not responsible for the statements made or opinions expressed in the JOURNAL.

A B S

Pension or Cash at Retirement

Many architects and those employed by architects in private practice are not aware of the fact that such employees can have pensions with very special advantages.

1. The employer enjoys full tax relief on premiums.
2. A With Profits Endowment Policy can be obtained at a lower rate of premium than normal.
3. Cash payments on early death are not liable for Estate Duty.
4. On retirement the full sum assured and bonuses can be taken as a tax free lump sum.

These four features constitute a Pension Arrangement which very few other people can enjoy. For further information please communicate with: The Manager, ABS Insurance Agency Ltd, 66 Portland Place, London, W1 (Telephone: Langham 5533).

ABS Christmas Cards

In response to many requests, the large ABS Christmas Card, shown on the cover of the November JOURNAL, has been reprinted. It is also available in black and white. The price is 1*s.* 6*d.* The cards illustrated on page 500 are still available. All cards may be obtained from the Architects' Benevolent Society, 66 Portland Place, London, W1.

Correspondence

The Editor, RIBA JOURNAL

Professional Responsibility

Sir, – I was glad to see the note on Professional Responsibility in the November JOURNAL. This question affects the reputation and standing of all architects, but I wonder if it is fair to imply that the increasing claims against the profession are mainly due to the ignorance or negligence of our younger members?

A Lloyds underwriter with long experience of indemnity insurance not only of architects but also of other professional men, told me recently that although inexperienced youngsters accounted for a number of comparatively small claims, the more serious losses were often due to firms with established reputations taking on more work than the principals could manage and delegating responsibility to inexperienced or unqualified assistants.

Yours faithfully,
JOHN BRANDON-JONES [A]

ABS

Dear Sir, – The great festival of Christmas is only three weeks ahead: during that time we will all be thinking about presents for friends and relations, and perhaps too for people we have never met.

May all who have had a good year financially spare a thought and a gift for the ABS.

Yours faithfully,
H. G. C. SPENCELY [F]

Technical Column

Building Centre Forum

The Building Centre Forum was set up in 1957 to provide architects and manufacturers with opportunities to meet and discuss building materials and equipment and other subjects of mutual interest. The meetings are generally small and very lively, small enough for everyone present to take part and lively enough that criticism is expected and taken without offence. Two meetings have already been held this year. 'The architect and the installation of telephones' when the GPO's new designs were on show; 'Trade literature for the Building Industry' when the RIBA/RICS/NFBTE Guide to the preparation of Trade Literature was reviewed; also discussed were the various means of distributing trade literature.

A meeting of the Forum was held on 6 December when the topic was 'Co-ordinated colour ranges for building'. Future meetings are:

Sanitary Fittings for Hospitals—10 January 1962.

Programme organised by the Plastics Institute—7 February 1962.

Films for the Building Industry—7 March 1962.

Trade Literature for the Building Industry

The RIBA, RICS and NFBTE have joined forces to produce a Guide to the preparation of trade literature in the building industry. The resulting pamphlet, which is available free of charge from the Institutions concerned, has been published by the Building Centre. One contributer at the Building Forum reported above welcomed the recommendations, but claimed that they were five years too late. This fortunately is not true since the RIBA and Building Centre have been publishing recommendations particularly in the conditions for the Trade Literature Competition for many years. What is new and pleasing is that this pamphlet is jointly sponsored and represents the views of a very large number of users.

Also published on the same date were the conditions for the 5th RIBA/Building Centre Trade and Technical Literature Competition. The closing date for the competition is 30 April 1962.

Brick Library

The Building Centre has formed a Brick Library which contains sample panels of facing bricks from all parts of England and Wales.

The Library enables architects and others to select or to match bricks for new and existing buildings, from the great range of textures and colours which are available in various parts of the country.

This is a valuable asset to the Building Centre in that it allows products of the same type to be compared one with another. I hope that it is an experiment which will succeed and be followed by libraries for other types of product.

The Brick Library is open daily during the hours that the Building Centre is open, i.e. 9.30 am to 5.00 pm, Saturdays 9.30 am to 1 pm.

Changes at British Standards Institution

RIBA representatives on BSI committees and others who know of BSI's work will welcome the appointments recently made. Mr Gordon Weston becomes associate director, Dr H. M. Glass technical director, Mr J. F. Stanley deputy technical director and Professor C. A. Geneve technical adviser (special duties). Mr P. Cutbush [*A*] takes on responsibility for Codes of Practice in addition to being head of the building section. This is particularly welcome since the line of distinction between a Code and a Standard has always led to ambiguities.

Supervisors safety booklet

As part of its safety campaign the Federation of Civil Engineering Contractors has published a booklet based on their analysis of 5,500 accidents. The advice is basic and largely illustrated by cartoons, but a copy should be on every site.

The booklet is in a handy pocket size and costs 5*s*. post free. There is a discount for bulk orders, five to nine copies costing 4*s*. 6*d*. each; 10 to 19 copies, 4*s*. 3*d*. each; and 20 copies and over, 4*s*. each. Containing 128 pages, the booklet has some 60 illustrations and a number of tables. A useful index is also provided.

Timber Engineering Course in the Midlands

A series of lectures, study visits and discussions is to be held at Westham House Adult Residential College, Barford, Warwick, from 19–21 January 1962. This has been arranged by the Timber Development Association in conjunction with the Mid-Warwickshire College of Further Education.

Details of the Course are as follows:

	Lecture	*Lecturer*
Friday, 19 January	Timber Engineering – its scope and development	P. O. Reece
Saturday, 20 January	Principles of Design in Timber	D. H. Moss
	Structural Timber Assemblies	F. D. Silvester
	Glue Laminated Structures: application, design and economics	D. H. Moss
	Timber Shell Structures	L. G. Booth
Sunday, 21 January	Building Bye-Laws	G. Waller
	Summarising Course and Final Discussions	F. D. Silvester

Study visits will be arranged to interesting timber structures in the vicinity.

Further details and application forms for the Course can be obtained from: The Course Secretary, Mr J. Richardson, Midlands Regional Officer, Timber Development Association Ltd, 55 Pershore Street, Birmingham 5.

College of Estate Management: Post-Qualification Course in Cost Planning

In recent years the most significant development in quantity surveying has been the growth of cost planning. Throughout the design process the quantity surveyor is firmly establishing his role as the architect's cost adviser. In essence, cost planning can operate in one of two ways. It can obtain value for money either by ensuring that designs are produced within a predetermined cost, or by a detailed investigation of the costs which flow from a specific project/design. The professional team can either design to a cost or they can cost a design.

There are a number of different cost planning methods and the College course is a comprehensive examination of the principles and techniques of the cost planning systems which have been evolved by members of the profession. The course has been written as a symposium comprising eleven papers and will include a one-day conference at the College in the Spring of 1962, at which it is hoped the authors of the papers will be present. The fee for the course is ten guineas and there will also be a conference fee for those who attend. It is hoped to provide all subscribers to the course with a synopsis of the conference proceedings.

The first paper is introductory and looks at the way quantities have been used throughout history to settle problems of building costs. It then discusses the concept of cost planning and how it differs from traditional practice.

The second paper discusses the factors which determine the amount the client can afford to spend on a building project.

Whilst the third paper describes the architect's design process and the nature of the information he requires, the fourth paper selects one particular problem illustrating the way design can affect building costs.

The fifth and sixth papers describe and illustrate the system of elemental cost planning which makes possible the production of a design within predetermined limits of cost, thus helping to ensure value for money.

The next two papers consider an alternative approach, which isolates the specific cost effects of a set of design proposals, to give the architect a guide in developing his design, with a full awareness of the consequences in terms of cost.

The ninth paper deals with a problem underlying all attempts at costing a design, namely, the technique of handling and collecting building cost information.

The tenth paper broadens the field of study by considering all the features in a scheme which, for its duration, provide the client and the community with value for money.

In the final, eleventh, paper the arguments put forward in the symposium are summarised, and cost planning is compared with the cost systems which have been developed in other industries.

Contributors to the Symposium

A. A. Bellamy, [*A*]; B. E. Drake, ARICS; P. W. Grafton, FRICS; R. Baden Hellard [*A*], DIP.ARCH, FIARB.; F. M. J. Lee, BSC(ECON); J. Nisbet, FRICS; C. M. Nott, FRICS; D. W. Nunn, OBE, ARICS; M. W. Parrott, ARICS; P. A. Stone, MSC(ECON).

Application forms are available from the Registrar, College of Estate Management, St Albans Grove, Kensington, London, W8.

ANTHONY WILLIAMS [*A*]

The Activity of the Building Industry

In his Presidential Address to the Royal Institution of Chartered Surveyors on 13 November, Mr E. C. Strathon commented on the future role of the quantity surveyor.

He said: 'It happens that in our generation, buildings throughout the country by reason of their age are physically sick and functionally obsolescent demanding their replacement on their existing sites or elsewhere; there is the further demand for building by the natural increase in our population and economy. Although capital investment at any given time is subject to short-term or long-term fiscal policies, I believe that the building industry, with the help of all those associated with it, will aim for increased productivity which will call for increased service by its professional consultants.

'Such factors as cost, new materials and methods of building in relation to the requirement for speed in building and in particular the inter-relation of capital and maintenance costs, must all form part of the service which a chartered quantity surveyor must be prepared to give. Cost advice, cost planning and cost control will be expected from the quantity surveyor as an important factor in the economic cost of building. Advice on design-cost alternatives and cost planning technique and the preparation of bills of quantities will not be enough; nothing less will be demanded than a complete service from preliminary and design stage through active co-operation at every stage to the speedy completion of the final account. It must not be a restful future waiting for the tide to bring in useful salvage and this is well recognised by the Quantity Surveyors Committee and the RICS Cost Research Panel which has manfully kept to its task during the last six years.

'The future will demand more research and a speedier dissemination of information and ideas to all practising chartered quantity surveyors; some knowledge of the results of this research would be of great value to other chartered surveyors who are concerned with the development of land.

'Research requirements must be planned and must take their place in the Institution's programme of contributing to the greater knowledge and experience of all its members.

'It would be of great interest to ascertain the inter-relation of cost of building and price of land. Would a lesser cost of the one contribute to a higher price of the other? We should learn more about this, but only painstaking investigation will produce results. Greater knowledge of this relationship could lead to more informed judgements being made on action which should be taken on particular projects.'

The Round Churches of Bornholm

By Cecil Stewart, MA [*F*]

In the Baltic Sea, midway between south Sweden and north Germany, there is a little Danish island about the size of the Isle of Wight, with four churches of a most unusual type, about which little has been written. Fergusson[1] mentions them, and so does Kenneth Conant,[2] but the references are very slight and so far no one seems to have attempted any adequate explanation of their special character. Even the monumental Volume VII of *Danmarks Kirker*, which is devoted to the island, does no more than record their architectural form and the particular features they contain. Yet these churches, if not unique, are at least extraordinary and wonderfully satisfying artifacts. In the first place, they are round, and in the second, they are of two or three storeys. Such ornamentation as they have seems to fix their date about the end of the 11th or the beginning of the 12th century. They are capped with steep conical roofs, like candle-snuffers, and are situated on relatively high ground about eight miles apart and two to three miles from the coast. They gleam in the sun with layers of whitewash. There are villages or hamlets adjoining, but these appear to consist almost entirely of buildings of this or, at the earliest, the last century. Historical records seem to be lacking. Even the graveyards are filled with modern stones, though in the porches of two of the churches are preserved monumental rune stones which are certainly as old as, and probably older than, the churches.

Kenneth Conant suggests that the plan of these churches may have been the result of the Norwegian king Sigurd's great pilgrimage to Jerusalem in 1107–11; that they are Templar churches. He may be right, but at that time Bornholm was not Sigurd's property; it belonged to the kings of Denmark. So far as I know, there are no similar churches in Norway, though there are two others in Denmark, at Bjernede and Thorsager, one at Visby in Gotland and another at Hagby in the south of Sweden. All these lands belonged, off and on, to the Danish crown in the 11th and 12th centuries and, which is more important, lie on the Baltic rather than the North Sea. It is more likely that the trade routes from the Baltic will provide a clue to their origin than will the adventures of a Norwegian king in the Holy Land. For these churches, apart from their rotundity, are not remotely like the Templar or Holy Sepulchre churches which are to be found in Italy, France and England. They are first and foremost fortresses of a most unusual kind.

From earliest times the Baltic coastal lands had one precious trading commodity, amber – the Danish sea-gold. The amber route during the Bronze Age had passed through central Europe east of the Alps, to Italy and the Adriatic Sea. But with the transfer of the capital of the Roman world to Constantinople, the entire trading system had been dislocated and a new route along the Russian rivers via Novgorod and Kiev to the Black Sea was established. Islands like Bornholm and Gotland became important trading stations *en route*. This in turn meant that they were worth plundering; and, according to Palle Lauring,[3] they were indeed plundered again and again. The plan of the churches of Bornholm may certainly be traced to the Crusader lands, but not to the church of the Holy Sepulchre; their origin is to be found in the bastioned walls of Constantinople, which in due course were echoed in the Kremlins of Kiev and Novgorod.

There were two outstanding principles in the scheme of Byzantine fortifications as developed in the Middle Ages. They were, first, that round forms were superior to square in the face of missile attack; and secondly, that a second, and even a third, line of defence was essential to any co-ordinated scheme. At Constantinople there were three successive hazards to be overcome before an enemy reached its goal. At the Fortress of Europe, a strategic point on the Bosphorus five miles away, there was a series of linked circular bastions each providing covering fire for the others. What we find at Bornholm is a curious adaptation of the most up-to-date methods of defence within one single structure, a structure which contained man's two most precious possessions – his faith and his worldly goods. It is more than a fortified church; it is also a fortified warehouse, and it is the warehouse which is accommodated at the higher level, so that even if the church should be lost the Danish sea-gold might yet be saved.

Briefly, the arrangement is as follows. The ground floor accommodates the church. It is circular, with a projecting chancel also rounded, and beyond this is an apse. In the centre of all is a massive column (or, in the case of the church of Østerlars, a circular arcade), which carries an annular vault. From the chancel a steep and narrow stairway leads up to the first floor, which, like the ground floor, is vaulted and sustained by a central column. The narrow mural stair carries on up to the top floor, which is the fortress proper. Here one arrives at a circumferal passageway, so that the defenders can retreat inside if necessary, and through slit-holes attack anyone who has reached this level. Should the enemy manage to break through the annular wall, there is, at Østerlars, a further inner ring of defence, and it is conjectured that from here a stairway led up to another defence point above all. It is wonderfully ingenious, and for the defenders must have provided a very satisfactory sense of impregnable security, even if, within this armoured shell, they were powerless to defend their farms and their homes. In one church, at Nylars, there was even an escape route at first floor level, so that one could drop down about six feet and gain access to the roof of the porch and then to the ground.

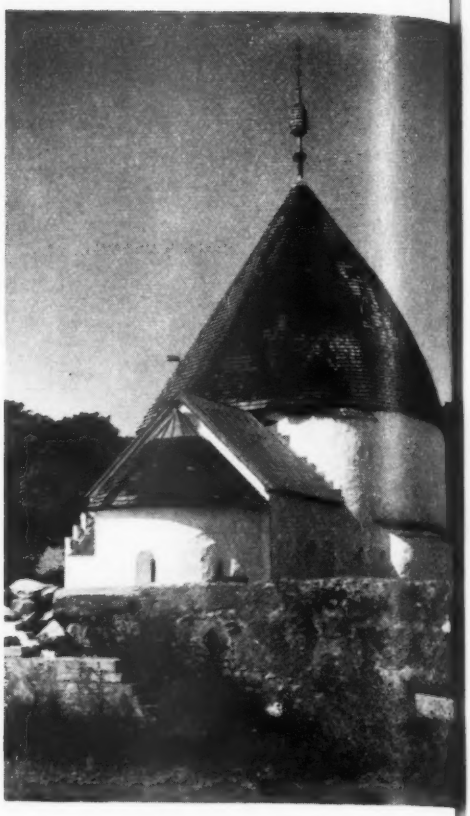
The efficiency of the system may be measured by the fact that the structures are all so intact. Only one, at Nyker, has lost its upper storey; two, Olsker and Østerlars, have been reinforced some time in the Middle Ages by formidable buttresses; and the porch at Nylars is a recent replacement. They stand today largely unspoiled, and with the addition of the steep conical roofs are probably more attractive than they ever were. But the first floors are no longer used as warehouses. They are bare and empty. The Danish sea-gold is now to be found in the tourist shops, for the amber route has been determined by the travel agencies.

Of special significance, in architectural terms, is the fact that there survive two other rotundas, almost identical in form but without churches on the ground floors. One is at Rønne, the capital of the island, the other is at Christiansø, a neighbouring island. They were built as late as 1650 and 1684 respectively, as arsenals or forts. This is strange, for by that late period the building of tower forts was long since superseded in the rest of Europe. Artillery had revolutionised warfare, and could destroy masonry from a considerable distance. But here in the Baltic Sea, in spite of the cannon, they chose, in preference to a complex system of

[1] James Fergusson: *A History of Architecture in All Countries.*
[2] Kenneth J. Conant: *Carolingian and Romanesque Architecture.*
[3] Palle Lauring: *A History of the Kingdom of Denmark.*

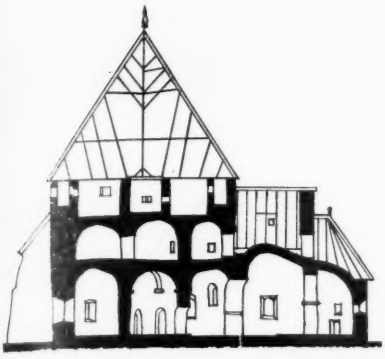
Olsker (S. Ols Church)

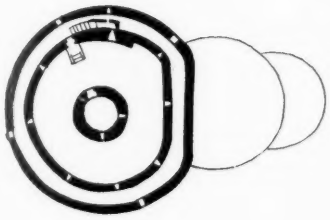
Nylars (New S. Lawrence)

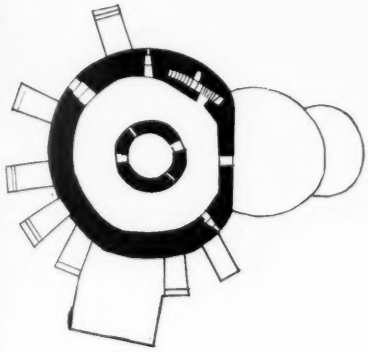


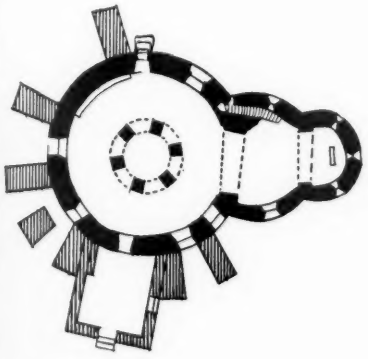
Nyker (New Church)

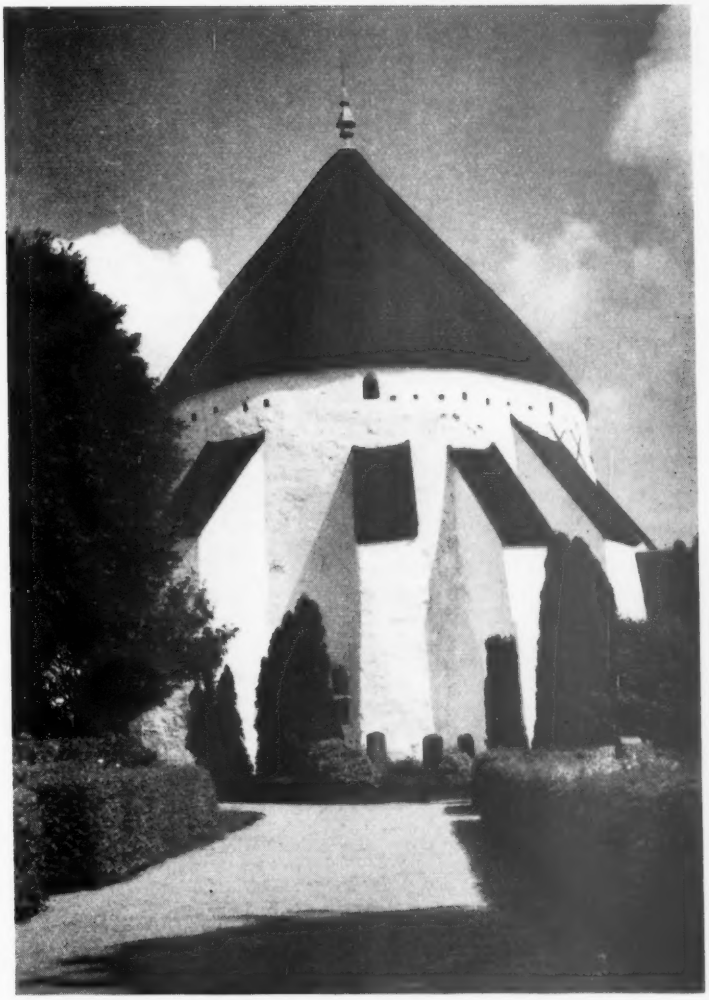
The Arsenal, Christiansø



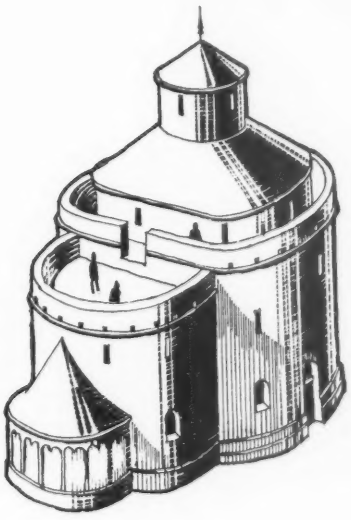








Østerlars (East S. Lawrence)
L: plans and section



Bornholm round church
conjectural restoration

embanked salients protecting underground shelters, to adopt a form of building which, after all, had stood the test of nearly half a millennium.

There is something surprisingly satisfying about these little warehouse churches. In a landscape low, green and undulating, these white cylinders with their witches' hats punctuate the scene, dominating the pretty little cottages around, and appeal because of their simplicity as something rather childlike yet incredibly strong and secure. They are statements as definite and as simple as oasthouses, grain silos or pyramids.

Proof of the original connection with the eastern world is to be found in the remarkable series of frescoes which have been preserved in the churches. They are Byzantine in subject matter, though obviously by local artists. The most extensive are at Østerlars, the most accomplished at Nylars. It was fortunate that the Reformation in Denmark was so mild that they were not destroyed. Lutheranism, it seems, was accepted as a political measure rather than as a matter of conscience. The Catholic clergy were deposed and in many cases adopted the reformed faith, married, and became pastors. The nuns were allowed peacefully to die out in their convents and, according to some records, behaved very badly when no longer under supervision. The churches suffered not at all. The pulpit became more of a focus than the altar, the sermon more important than the mass. At Bornholm, it seems, the pastors' sermons were of such interminable length that there still survive, alongside some of the pulpits, the 16th-century hour-glasses which ensured that the sermon should not exceed an acceptable duration.

There are other curious features. The fonts are formidable basins of granite – the one at Østerlars is nicely accommodated in the centre of the inner arcade, with the pews ranged round beyond. Each church has its independent bell tower, with a square stone base and a half-timbered superstructure. There are several lych-gates marking the entrances to the graveyards. The steep roofs over the churches are probably late medieval additions. The main timbers are certainly early, but they are so reinforced with recent struts and stays of all shapes and sizes that it is difficult to be certain of the original arrangement.

The four churches of Bornholm do not, I dare say, add much to the general pattern of architectural history. They provide, nevertheless, a justification for a holiday abroad; for Bornholm, like the Isle of Wight, is above all a holiday resort. It can be reached by air in only four hours. But so far it is frequented almost entirely by Danes and Swedes, and that, somehow, makes all the difference.

Practice Notes

PRACTICE QUERIES

1. Charging of architects' fees on quantity surveyors' charges

Q: I believe there are cases in which the architect's fee is charged on the total cost of the executed work, which includes in that total the fees charged by the quantity surveyor. This does not appear to be specifically covered by the Scale of Charges. Is this correct practice?

A: This question generally arises when the quantity surveyor is paid through the contractor: it should not arise when the quantity surveyor is paid direct by the building owner.

In no circumstances should members include quantity surveyors' fees in the cost of the executed works for the purpose of computing their fees.

2. Architect's liability

Q: Can you tell me for how long an architect is liable for a building erected to his design?

A: An architect's liability is defined by the Limitation Act, 1939. In the case of an agreement under hand, the time during which an action for negligence can be brought against him is limited to six years from the date on which the cause of action accrued. In the case of an agreement under seal, the period of liability runs for twelve years.

IN PARLIAMENT

In the Housing debate on 6 November Mr Graham Page (who is Chairman of the Housing, Local Government and Works Committee of the Parliamentary Conservative Party) said of local authority building:

'I would aim to replace subsidised local authority building by new town procedure – not at once to stop all local authority subsidised building, but to aim to replace it by the building of new towns and by adopting new town procedure not only for building new towns out in the countryside, but for building new towns within towns.

'. . . I ask hon. members to forget for a moment the big towns, like London, Liverpool, Manchester, Birmingham and Leeds, and to think of the smaller boroughs and urban districts with waiting lists of 4,000 or 5,000 and with massive slum clearance programmes for which they have not the professional and expert people needed to carry them out. Those local authorities can see no prospect of doing it themselves even if assisted by all the subsidies that the Government like to give them. They have not the qualified men there to do it. It would have to be done by development corporations in those areas which form communities of their own and which could thus be developed by new town procedure.

'If the Government would proceed on those lines, with new towns within old towns, they would tackle the problem of the localised nature of the shortage of homes and we should get a balanced development in keeping with modern thought. I ask my right hon. friend, when thinking about this, not to spurn the offers of private enterprise to come in on that type of development. There have already been offers by private enterprise to develop new towns and to build whole new towns, and I believe that co-operation by cleared site offers to private enterprise could produce valuable results.

'. . . We are not using our building resources as economically as we should. I realise that if we are aiming at a target of five million houses in ten years, we cannot achieve it without a radical reform in the building industry and in building techniques. We cannot produce five million traditional houses in the next ten years with our present building resources. I do not want to suggest that we should increase our building resources. I believe that it could be done by using new techniques in building.

'. . . The Ministry or the DSIR should have a team working on new building techniques, discovering and testing them, and trying out quicker methods of building houses. Surely we do not have to go on taking the months that we do take to build modern houses.

'Who is to blame? I think that there are many on whom one could put the blame. First come the bye-laws. The building trade tell me that they cannot possibly build non-traditional houses to meet the present bye-laws. Building societies are perhaps to blame for not making advances on non-traditional houses, and perhaps the Treasury, which has not been prepared to support local authorities who wanted to branch out in experiments of this sort. But it is not beyond the wit of man to produce a house which could be erected in a matter of hours rather than months. We ought to try to discover the techniques for doing that.' (6 November 1961.)

Building Rate

Mr John Hall asked the Minister of Housing and Local Government and Minister for Welsh Affairs what should be the annual rate of house and flat building over the next 20 years to meet the needs of all families requiring houses, to replace slums and to eradicate overcrowding.

Dr Hill: The best estimate I can make is that if in the whole of Great Britain we could continue building at the rate of about 300,000 houses and flats a year, we should, over the next 20 years, meet the needs as we at present see them – though even then I do not think that we should have replaced all the slums.

Land

Mr John Hall asked the Minister what was the total acreage of land available for housing in the home counties; and how long this would last at the present rate of building.

Dr Hill: On such information as is available, the best overall estimate I can make is that there is land to last about eight years on the basis of present allocations and approvals. I am in touch with the planning authorities on the allocation of further land up to 1981, and the supply of land for housing will be one of the factors to be re-assessed in the examination of the planning needs of the south-east generally. (8 November 1961.)

Standards and Values in Motor Age Towns

Extracts from the Fifth Rees Jeffreys Triennial Lecture given under the auspices of the Town Planning Institute at the RIBA on 26 October by C. D. Buchanan, BSC, AMICE, MTPI [*A*]

Introduction

William Rees Jeffreys, whose name is perpetuated in the title of this series of lectures, was born in London in 1872. His passionate interest in roads started about 1896 in those exciting days when the motor vehicle was first making its mark, and when a few people were agitating for improvement of an archaic system of highway administration. In 1903 he organised the setting up of the Motor Union of Great Britain and Ireland which was eventually to be amalgamated with the Automobile Association, and he was concerned with the founding of the Commercial Motor Users Association and the Institution of Automobile Engineers. In 1910 the Road Board was established – the first central authority for roads, it has been said, since the Romans left – and Rees Jeffreys was appointed Secretary. He held this post until 1918 when he resigned, and a few months later the Board was absorbed into the newly-formed Ministry of Transport. Thereafter Rees Jeffreys devoted his energies to a wide range of activities which included a rest-of-his-life campaign for better roads, and a business career in which his financial acumen enabled him to amass the considerable fortune which he subsequently left in trust to promote in various ways the further study of highway problems.

In the preface to his book *The King's Highway* Rees Jeffreys wrote 'Through many disappointments and a few achievements I have been sustained by the faith that the building and maintenance of roads – safe, adequate and pleasant – on sound financial bases, is one of the surest ways to raise the standards of living, to advance civilisation and to promote the well-being of the people'. I think those are still wise words, but you only have to look at towns to see that events are taking a turn which not even Rees Jeffreys in all his wisdom foresaw.

What the motor vehicle has done essentially is to bring reality to a dream which must surely have possessed mankind for many centuries – the dream of a means of rapid personal movement with only a nominal expenditure of physical energy. In its full form this age-old dream was the flying carpet giving three-dimensional movement – whether we shall get this, and if so when, are crucial questions for town planning. But there is no doubt that the two-dimensional stage of the dream has become a reality, and the effects seem likely to extend beyond anything the road pioneers at the beginning of the century had in mind.

It is understandable that in the early years of the century the thinking should have been dominated by two pressing needs – the execution of comparatively simple works of engineering to enable the vehicles to get along the roads, and the devising of an administrative machine to get the work done and paid for. The most urgent task was to deal with the nuisance of dust, and if there is one thing the pioneers have to their credit it is that they commenced the improvement of road crusts, which, continued methodically over the years, was soon to give this country the best, most intricate and fully-penetrative network of all-weather roads anywhere in the world. This superiority has been maintained to this day. It is this self-same network which is now enabling townspeople in their millions, as the use of the motor-car comes within their grasp, to penetrate to every nook and corner of the countryside and coast. Whether the pioneers thought of this as a long-term social objective is open to question, but whatever fears one may have for the countryside as it becomes overrun, there is nothing that can now reverse the process.

With a blindness that now seems almost perverse the long-ranging influences of new roads and major reconstructions were not foreseen except that occasionally a project was commended as likely to facilitate, in a kind of colonial pioneering way, the opening up of land for development. On a tactical scale the frustration of the new roads by the frontage development they themselves attracted was not foreseen until – too late – the Restriction of Ribbon Development Act was passed in 1935; and on a strategic scale the profound influence of motor transport on the distribution of industry and the whole organisation and functioning of towns seems not to have been thought about.

Yet, as one reads the records, there is evidence of a passionate desire to do the right things and not to fail future generations by taking too small a view. In the Report on the Administration of the Road Fund for 1920–21, for instance, it was recorded 'An excuse may be found for the lack of foresight shown by our forefathers in anticipating the modern development of motor traffic. But if the present generation repeats its mistakes it will be sinning against the light'. My purpose in quoting this is not to criticise, but only to show how easy it is to sin against the light even whilst consciously trying not to do so, and this is a danger that besets us today just as much as it did those who were struggling with these problems after the first war. As a society we seem to have been utterly captivated by the motor vehicle and prepared to invest astronomical amounts in its manufacture, purchase and use, without at the same time giving any regard to its consequences or to the possible need for expenditure of equivalent sums on its accommodation or to undertaking the fundamental researches required.

Time and again over the last half-century we have carried out schemes, confident that they were sound long-term measures, only to see them overwhelmed by the growing press of traffic and development. By-pass upon by-pass now needs by-passing. By the grace of the English countryside we are getting a second chance to tackle the long-distance routes, and M1 is the first manifestation of this. But in the towns, where we are really only just starting, there can hardly be any question of second chances. We have to do the right things now or miss the opportunities for many years. It is not my purpose in this lecture to discuss 'the right things' (in the sense of technical measures to deal with urban traffic) in detail, but rather to go back one stage and see whether, without posturing as a Geddes or a Mumford, there is any general philosophy relating to the nature of towns within which solutions to traffic problems should be sought. In effect I shall be concerned with the basic environmental values, for I think it is the bitter experience of the last 50 years that motor traffic and many of the measures so far taken for dealing with it have been insidiously eroding both the common amenities and higher pleasures of urban life. This process, it seems to me, is likely to continue unless stock is taken of the situation and a new view taken of towns as they ought to be. It is commonly said that towns will die unless motor traffic is catered for, but

if in the process they become not worth living in then they will die just as surely.

Fundamental Challenge of the Motor Vehicle

If asked to state in one sentence the basic problem which the motor vehicle poses for town planning, I would say that it lies in the challenge to the principle of compactness. If there is one thing that planners have been agreed about in recent years it is that urban sprawl is a bad thing.

Now planners may be agreed about sprawl, but I doubt very much whether this view is shared by the public at large. It must be recognised too that all the factors making for sprawl are still as strongly present as ever before. Indeed it is now possible to distinguish a new and formidable partnership between the suburbanism which seems to have entered our souls and the motor-car which has captured our hearts. This is the driving force behind the battle that is constantly being waged in the green belts between would-be developers and the planning authorities. The natural drift in our affairs is towards sprawl, and any town planner possessed of proper humility must question in his heart the wisdom of trying to reverse trends that seem inexorable.

It has been said that we tend to echo America not through any actual desire to copy, but simply as a natural response to similar conditions. If this is so, and it is plausible, then is there any reason to think that as car ownership increases to American levels there will not be a strong tendency for a repetition here of the developments that have taken place over there? That is to say a very considerable sprawl of suburban building based primarily for communications on the household motor-car or cars, set here and there with new shopping centres surrounded by ample car parks, and tied together by expressways for motor traffic? Assuming that all this development were well done – that is to say the houses well-designed and the gardens and settings well-landscaped (and whatever you may think about the Englishman's taste in architecture I believe he has a natural eye for gardens and landscape which only needs a little encouragement to produce good results) – assuming all this, then where would the harm lie? Is it not giving people exactly what they want, and exploiting a remarkable invention to its logical conclusion into the bargain?

Much criticism is heard these days against American suburbanism, but rarely is it possible to pin anyone down to setting out the faults of it. Los Angeles is frequently held up as the ultimate horror of motorisation, but it would be more convincing if someone would set out the reasons. Some American commentators join in the warnings, but equally I have heard others stoutly defend Los Angeles on the not inconsiderable grounds that four million middle-class Americans love it and as many more are bursting to get into it. I find little to suggest that many of the features of Los Angeles would not appeal very strongly indeed to large numbers of people in this country.

Where, then, is the harm? Why not let the motor rip, taking us where it will with its spreading suburbia and regional shopping centres? Why not accept the concept of a motorised society with life organised on wheels, even if it means giving up towns as we have known them in the past? Is it not the case that towns are constantly evolving, and it just happens that at this point in time they have been hit by a more powerful force than ever before which is seeking to change their shape drastically by a process of disembodiment? Why, in particular, do we need 'town centres' when motor and air transport, the automation of office and business processes, and developments in telecommunications would seem to make it possible to organise things much better on a dispersed basis? Why not abandon town centres as they now exist with the seemingly hopeless problems they involve for a motorised society, and start afresh?

These are fair questions for the motor age, and they have all been pressed upon me, particularly by younger people, when I have been talking on this subject and putting the case that there are values worth retaining in fairly compact towns. I have never found it much use on these occasions to produce the conventional arguments that planners have been resorting to for many years when arguing against urban sprawl – economy in sewers and other services, proximity to communal facilities, preservation of agricultural land – these do not seem to carry much weight with people who see us entering (I hope they are right) an age of affluence and mobility and rapid technological advance. They find it much more to their liking to be told that urban renewal is flogging a dying horse in the form of cities that are doomed for a dozen different reasons.

I think one has to have a good deal of humility in trying to forecast the long-term future of towns and cities, admitting the possibility that the progress of science may bring about changes unimaginable at present in our whole way of living. But meanwhile people have to live, buildings have to be built and dispositions have to be made, and all this must be planned and done as best as we can with the knowledge available. In my own assessment, with the knowledge we have, it seems quite unthinkable to abandon at this stage the idea of towns, of people clustered together in concentrations of buildings. It is an arrangement that has served the world very well for a very long time, meeting the needs of agricultural communities and highly industrialised societies alike. There is still weight – much weight I would say – in the conventional planning arguments against sprawled out urban areas. For our towns, too, there is the accumulated investment of centuries, not only in the form of the more recently developed services, buildings, roads and railways, but in the form of history and architecture and a whole tradition of human activities. I do not see how anyone could be so sure of himself as to advocate the abandonment of all this.

From the opposite angle I see another serious disadvantage in towns transmogrifying themselves into great spreads of suburban development tens of miles across, laced together with express highways with 'facilities' geometrically placed at the interchange points. The disadvantage is the loss of open country in the real sense of the term. You may think I am jumping to an emotional conclusion when I proclaim my belief that open country, broadly uncluttered by works of man except in relation to agriculture, and in generous tracts rather than in isolated reserves, and readily accessible, is essential for survival in a generally materialistic and mechanised world. This to me is the finally convincing argument against urban sprawl, and I do not even have to reinforce it with recollections of the marvellous richness and variety of the countryside we happen to possess.

So to me the case for compactness in towns is complete. I believe towns can survive within the compact tradition, and that it will be in the best interests of a small country with a big population to see that they do so, even if it involves some curtailment of the desire for motorised suburban living. But, as I have said, the forces operating against compactness, particularly the compactness of residential areas, are powerful indeed and it will require all our vigilance to resist them. This, I would say, is where we might 'sin against the light' even whilst striving not to do so and confident that we were succeeding. Sprawl is insidious, like dry-rot it does not necessarily work out from one centre but from spots of infection which gradually spread out and coalesce. Motorways could be the threads of infection, for such roads enable commuting journeys of 40 to 50 miles and thus suburban pressures could build up beyond as well as inside the green belts. Of all the values to be sought in the motor age urban compactness seems to me the most crucial and the most difficult, for it has to be sought in the face of a tide that is driving the other way. The un-built-up areas of southern England, with the controls relaxed, would disappear within a decade under a Los Angeles-type flood.

The Motor Vehicle versus Environment

I have so far concluded that in spite of the fundamental conflict between the motor vehicle and the principle of urban compactness, the principle is nevertheless valid in the conditions of our country. The conflict therefore has to be faced, and I would now like to proceed to discuss its principal by-product – the harsh reaction of the motor vehicle on the compact environment.

This is really the main submission of my lecture: that terrible things are coming to pass as a result of the influence of the motor vehicle. This is a personal view, of course; I hope to persuade you to agree with it, but I am by no means sure that I shall succeed in this aim because we seem assailed by a curious fatalism in these matters, with a readiness to put up with dreadful conditions which I am sure we would reject if we were able to approach them afresh. One explanation is that the situation has grown up with us, gradually enveloping us without our realising what has been happening. Another lies in the mass split-personality which assails society when it gets into the grip of the motor vehicle. The mere act of being sealed up in a vehicle induces a change of mentality characterised by indifference to all considerations other than those relating to the journey in hand. To the homeward-bound lorry driver residential streets that offer short cuts are there for his convenience; to the motorist pedestrians have no function other than to obstruct his progress; to the motor cyclist the noise of his exhaust is music.

I do not think I am exaggerating when I say that terrible things are happening. Day after day they are reported in the papers. I know people who say that far too much is made of road accidents, that they are not numerous in relation to mileage travelled, and not excessive compared with accidents in the home or in industry or deaths from cancer or other diseases. But to me there is something peculiarly horrible about road accidents – they are man-made to a degree that differentiates them fundamentally from the grief and suffering caused by natural diseases.

The position to which we have now degenerated is that every day people in towns are being forced literally to run for their lives from motor traffic.

In addition to the physical dangers now present in urban streets there is also the menace of vehicular noise. Here again is a situation that we have grown up with so that we seem indifferent to what has happened. That the world should get noisier to some extent is to be expected – the aeroplane, for instance, has destroyed the absolute peace and quiet that once belonged to large parts of the countryside – but there must surely be limits to what people should be expected to bear. In most central town streets, and in many others including particularly the radial roads, vehicular noise now seems to have reached a level that detracts seriously from the efficiency of the streets and inhibits the enjoyment that one might think, on a simple assessment, should belong to such places.

The nuisance of noise is not only laid along the streets. It penetrates beyond the streets battering at all hours of the day and night into living rooms and bedrooms and gardens. Many a pleasant house which some family has loved has been rendered unbearable. Many a pleasant street has become unliveable overnight by the mere erection of a divisionary signpost by some authority desperately seeking to keep traffic on the move. In many a hotel sleep for visitors is restricted to a short period in the small hours. Even new buildings are not safe.

Every type of vehicle contributes to this pandemonium, but buses and heavy lorries are the worst offenders with the noise source more usually located in the engine and transmission rather than the exhaust. Nearly as objectionable, however, are the small bubble cars and scooters where the exhaust is the main nuisance. As for the heavy motor cycles, I find it difficult to understand why we should have to endure what we do in order to gratify the sensory pleasures of a comparatively few young men. I know it does gratify them for I can still recall my own apprenticeship on heavy motor cycles, and I suppose I ought to admit that I was once heavily fined for making a noise on one of my favourite machines. But that was many years ago, and I doubt whether even then I would have done what I saw recently in a Midland town on a summer evening – three young men riding round and round a roundabout in formation with a combined exhaust noise that would have done justice to a squadron of Spitfires.

I do not know how far it will be possible to overcome vehicular noise by improved design. The motor-car has been made comparatively quiet, and on the face of it one would think that the same might be done for the heavier vehicles, but it is a subject on which the manufacturers are curiously reticent. My guess is that they probably could do a good deal, but as it would involve higher costs they are not likely to move until public opinion forces them. But whatever may be the truth of that, there will always be a user aspect of vehicular noise – only a sense of obligation to the public, for instance, will convert the driver of the empty lorry who, with loose fastenings and chains that rattle and crash, and chocks and baulks that racket about, takes his vehicle at speed through residential streets without a thought for the people who live there.

To complete the triumvirate that now dominates city streets there must be added to danger and noise the nuisance of exhaust fumes. Again, the situation having developed gradually, it needs a conscious effort to see what is happening. Irrespective of the medical dangers of exhaust fumes, about which there still seems to be some uncertainty, I would say that they have now reached the proportions of a really disgusting nuisance. As in the case of vehicular noise I do not understand how far we can hope to see fumes eliminated by improved engine design. I daresay something can be done, but I should be surprised if it went very far towards achieving the cleanness of atmosphere which I believe should obtain in those parts of towns where people walk or congregate.

These three are by no means the only deleterious influences of motor traffic. There are the advertisements designed to catch the eye of drivers and passengers, the multiplicity of signs and direction boards, the railings which so often are bent or battered, the filling stations with their restless displays of pumps and lights, the dreary oil-stained car parks, and perhaps most serious of all, the way in which the press of traffic obscures and makes it not worth while to try to appreciate the architecture.

My submission is that the influences I have tried to describe, from danger and its attendant anxieties to the obscuring of the visual scene, are now threatening the civilised functioning of urban areas. Their own insidiously numbing and paralysing effects prevent their recognition. They are brutalising influences breeding indifference to the appearance of places. We can litter the London squares with cars, pack Horse Guards Parade with them, turn Parliament Square into a ridiculous garden set in a turmoil of traffic, and accept a hideous array of signs and signals, advertisements and filling stations and think nothing of it, or about it. Crossing river bridges in a great city should be an exciting experience, but in London the noise and stench of heavy traffic detracts seriously from the enjoyment. The finest bridge of all, Waterloo, we have turned into a car park. At Piccadilly Circus the people bunch round the steps of Eros in the midst of a tight whirlpool of traffic. On the South Bank, by the Festival Hall, a glimpse can be had of a new kind of environment, but on the opposite bank the gardens are all cut off from the river by a pounding torrent of traffic, and on the river bank itself the noise is overpowering. It is the river walk that people like – go along the Embankment towards Blackfriars on a fine day at lunchtime and you will find the wall overlooking the training ships packed with people, but within a few feet of them is this hideous bedlam of traffic. What a place it might have been, this whole stretch from West-

minster to the Tower with the teeming cities on one side and the variety and interest of the river on the other!

All this is not confined just to London. Everywhere, in every town and village of whatever size, these turmoils of traffic are boiling up and these effects in greater or lesser degrees are being experienced. Charming little country towns, which in many ways give English life at its best, are being made horrible by traffic just at the very hours when the citizens should be able to enjoy them. Nor is the story in other countries very much different. In Paris recently at seven o'clock in the evening, driving up the Avenue de la Grande Armée, I found myself in the midst of *ten lanes* of cars proceeding towards the centre.

Yet in Paris, in a motor-car, you can certainly get around. With its wide boulevards and great open intersections, it has lent itself to traffic engineering techniques, and traffic moves at a speed which leaves the English visitor amazed. But the price that has been paid for this in other directions reinforced the feeling I have had for some time – that measures directed simply to speeding the flow of traffic are not by themselves necessarily in the best interests of urban life. There is at least this merit in a street that is jammed to a standstill – you cannot be run over.

With a real prospect of a doubling of the number of vehicles in circulation in this country within ten years, I cannot avoid the conclusion that the present difficult situation is bound to become very serious indeed. I am by no means clear what will be the best methods of coping with it, but I am quite sure that unless we keep our minds firmly fixed on a vision of urban areas as they might be, then we are likely not only to make mistakes, but to engender disasters. The main danger lies, I believe, in treating these problems as though nothing more were involved than the movement of vehicles. Edward Higbee, writing in 'The Squeeze' (a study of space and development in the US) has a lively description of this danger as he sees it on the other side of the Atlantic: 'The community allows the highway engineers to eliminate the bottlenecks, yet after each costly elimination it is discovered that the trouble has only shifted to another location. . . . By acquiescing to one traffic emergency after another as though only a little face-lifting were necessary, metropolitan areas have allowed themselves to be overpassed, underpassed, widened, straightened and segmented by gasoline gulleys *ad infinitum*, yet the headaches of congestion grow faster than the fresh supply of asphalt aspirin'.

Much of the difficulty arises from too narrow an understanding of what is usually called 'the traffic problem'. Far more is involved than the movement of vehicles or the shortage of car parks. Viewed more positively the traffic problem is a design problem: to devise arrangements of buildings, the spaces around them, access ways and circulation routes in a manner that will permit the fullest use of the motor vehicle while at the same time retaining or creating good urban environments. The term 'environment' is vague and includes many qualities few of which admit of measurement or even of sharp definition, but it obviously has much to do with the *appearance* of physical surroundings and also with their *convenience*. If it is desired to exploit the motor vehicle to the uttermost then the most *convenient* environment will be the one which caters for *all* movements to be performed by vehicles – a mass taking-to-wheels with universal 'drive-in'. With such an arrangement the appearance of towns would be quite unlike the familiar urban scene of today, and a new set of aesthetic 'rules' would apply – the aesthetic would be designed for people who would be peering out of the windows of vehicles whether moving or at rest.

However, we need not worry very much about 'mass drive-in', even though it is the direction in which many people would like to move, because it is a condition that cannot be satisfied along with urban compactness, the space requirements for circulation and storage being far too large. Since there must be a limit to the extent to which vehicles can approach all buildings in a compactly developed area it is inevitable that the pedestrian must play a part in the movement systems. Now once the need for pedestrian movement is accepted, then stringent conditions apply in order to ensure the *convenience* of that movement. The movements must not be too long nor too exhausting, and above all there must be substantial insulation of the pedestrians from the danger, noise and other adverse effects of motor traffic. This requirement for insulation is of the greatest importance in determining the physical form of development. It applies, of course, not only to pedestrians, but (in respect of the noise, fumes and vibration of traffic) to the occupants of buildings as well.

There is still, however, the appearance or visual aspect of environment to be considered. In a city with both pedestrian and motorised movement, whose 'eye-view' is going to count for most – the pedestrian's or the driver's? This is arguable. But I do not think it is really open to question that as far as possible both eye-views should be interesting and worth looking at. Of the two, however, I would unhesitatingly give pride of place to the pedestrian.

I therefore reach the paradoxical conclusion that the pedestrian's environment is of the greatest importance for the motor age, both in respect of his general convenience and what he looks at. The term 'pedestrian segregation' is much used in planning today, but it conveys neither the right idea nor the whole idea. It is vehicular segregation that is required in order to achieve pedestrian liberation. Pedestrians should have the freedom of the city. They should be free to wander about, to sit around, to look in shop windows, to meet and gossip, to contemplate the scene and the architecture and the history. They should be treated with dignity and only as a last resort pushed down into tunnels. Discipline is the last thing they need. Above all, without being molly-coddled, for to a limited extent they must learn to mix with motors, they should be free to apply their attention to their immediate concerns without the awful thought that one false step might bring death or serious injury.

I emphasise that I do not exclude the desirability of making it worth while visually to drive or ride round a city, but the aesthetics for the pedestrian eye-view and the driver eye-view are necessarily different. Yet the two aesthetics ought not to be mutually exclusive – for the pedestrian there is great fascination in looking down on traffic from decks and footbridges, and the driver can be refreshed with glimpses into the static environment of the pedestrians.

For the development of a pedestrian environment effective in both convenience and appearance it is obviously necessary to have a minimum area to design with, large enough to contain a useful selection of buildings with space to compose their arrangement. Such an area poses two traffic problems – the initial distribution of vehicles to suitable points of entry from outside, and the internal circulation of vehicles to their final destinations.

In theory one of these areas could cover a whole town given a sufficiently elaborate design, but in practice the dispatch of all the vehicles to the multitude of buildings is so complicated that it is necessary to canalise many of the movements along shared routes, obliging the vehicles to follow these until they reach a suitable point to turn off to their final destinations. For vehicular efficiency these shared routes must not have too many points of access and must necessarily be fairly wide with elaborate intersections, and as a result they tend to become severers of development unless they are expensively contrived to flow over or under the buildings. Thus the urban form is likely to consist of a *series* of environmental areas or units served by a network of roads for the primary distribution of traffic to suitable points of entry to the units. This arrangement, which is really no different in concept to the passages of rooms of a house, would seem to be the basic pattern required for the successful combination of environment and motorisation.

It may be objected that this is no

more than the old precinct theory brought up again. In a sense it is, but it is in a simpler and basic form. I go no further than to postulate areas where the pedestrian environment is paramount, linked by a distributory network for the traffic, whereas the precinct theory was always tied to the idea of areas of 'homogeneous use' *bounded* in the same horizontal plane by traffic arteries. On my definition the distributory network could as well pass *underneath* the environmental unit as round it. If this is broadly the urban form required to cope with traffic, it is not difficult to see what a plight we are in a city such as London where the places that ought to be established or maintained as environmental units are slashed and carved by the distributory network. If indeed you seek one graphic illustration of the influence of the motor vehicle on cities you will find it in the fact that the long-standing concept of the ordinary shopping street, with pavements and traffic passing up and down, has been killed stone dead as a viable arrangement.

I daresay most people would agree that the interior environment of buildings is important and can have depressing or enlivening effects as the case may be on the occupants, but I doubt whether many would ascribe the same importance and potential influence to exterior environments. It has often been said that a nation gets the architecture it deserves, but I think this applies still more forcibly to environment. A well-designed individual new building merely reflects the enlightenment of a single client, whereas a good environment represents the collective enlightenment of a community. Yet the ability to appreciate environment cannot be far below the surface. Thousands of people flock to Rome and Venice, Stockholm, Oxford and Cambridge and are impressed by the environments they see (in so far as they *can* see them through the press of motor traffic), but their appreciation is rooted in historicism, and they seem unable to accept that there is any lesson for their own daily surroundings. To some extent I think this may be explained by the mental confusion in which so many people find themselves over the development of modern architecture, but I daresay it is the growth of motor traffic with its blunting of susceptibilities that is mainly responsible for the ordinary person giving up the idea that urban environment has any real significance in life today. This seems little short of tragic because we are now an urban nation and we should be finding our most convincing material expression in the form and appearance of our towns.

[Mr Buchanan then drew an analogy between circulation in a large building such as a hospital and traffic circulation in a town.] He went on:

I have referred above to the possibility that environmental needs may put a definite limit to the amount of traffic that urban areas can assimilate. But the limit also depends upon the elaborateness of the design, and this in turn depends on what people are prepared to spend and how much change of scene they are prepared to accept. I have little doubt that to extract the most from the motor it is necessary to think in terms of at least two planes of circulation with the motor traffic below and the pedestrians and their environment above. As a basic arrangement it has very great possibilities, but it is expensive and it can be secured only by the reconstruction of sizeable areas. Now whenever I mention this, people get up and say it is fantastic. Well, let them say it, but let them realise also that in rejecting the idea they are setting a strict ceiling to the exploitation of the motor vehicle. Unless people are prepared to accept and pay for measures of this kind they will sooner or later find that they cannot use their adored vehicles to the extent they had desired. This position has already been reached in some areas even though a good environment has not been maintained.

In addition to places where we miss the opportunities through lack of readiness, lack of courage, or inability to bring about the necessary co-operation between owners and developers, there will also be places where for reasons of aesthetics or history or even plain sentiment we are not prepared to effect drastic changes. Here, as I see it, the traffic will have to be cut to fit the locality if the ordinary decencies of environment are to be secured.

I think I might summarise the general theme of this lecture by saying it has been an attempt to stake the claim of environment against the erosion of the motor vehicle. A severe difficulty is that there are no techniques for evaluating environment. It would doubtless be futile to try to devise one to cover aesthetic aspects, but it ought to be possible to produce an index that would convey the liveability of an area or a street at least in respect of the standards that are so vulnerable to motor traffic – safety, quiet and cleanliness of atmosphere. With such an instrument it would be possible to compare one place with another, and a new criterion would be brought into use to balance the one which has dominated the field for so long, namely the convenience of through-traffic. Such an index applied to existing streets would reveal the true extent of the problems involved in 'living with the motor vehicle'. Based even on minimal standards of safety and quiet I think the total problem would be revealed as far larger than anything we have so far imagined. To give but one example, many a small town which at present commands no priority for by-passing because there is no serious obstruction to the through-traffic, would nevertheless reveal an environmental problem perhaps rendered even worse by the fact that the through-traffic has a fairly free run. Environment at the moment commands no priority of its own, it is the Cinderella of town planning. A statutory town plan can be discharged to the letter, but environment can drop right out of the process.

In suggesting that the problem we face is essentially one of big-scale architecture I am not claiming it as the exclusive sphere of the architectural profession. I think it is not without significance that most of the creative long-term ideas about urban traffic seem in fact to be emerging from the architectural profession but this is because architects, whose work is so closely involved with human needs, seem to be the first to realise the deterioration of environment that is now taking place under the influence of motor traffic. The job as I have it in mind is essentially one for professional co-operation. We need a new concept of such co-operation and the basis of it should be the acceptance of common objectives with an effort by each profession to define the contribution it can make to the achievement of the objectives. In the new towns, in conditions which were favourable to it, the kind of co-operation I have in mind seems to have been achieved, but in many an existing town a state of misunderstanding exists between the professional officers which cannot bode well for the great opportunities that lie ahead in town redevelopment.

Even if the professions give of their best there is clearly not going to be an easy, quick or cheap solution to the problems arising from the public's avid desire for motor vehicles. Within a decade we are likely to be faced with twice the number of vehicles we have now, and our roads are already the most heavily congested in the world. As I see the position, even granted investment in new construction and urban rebuilding at unprecedented rates, the growth of traffic is going to demand a major act of self-discipline by the whole nation. It is not a traffic problem that we are faced with so much as a social situation.

(Note: The opinions expressed in this paper are personal to the Author and should not be taken as necessarily representing the policy of any Government Department.)

The Human Way Out

An address given on 28 September by Mr Lewis Mumford, RIBA Royal Gold Medallist 1961, at the University of California, Berkeley, USA, where he is Visiting Research Professor of Governmental Affairs.

The subject of this talk, 'The Human Way Out', is not of my choosing; it has rather been thrust upon me by current political events and reactions. At this critical moment in human history, I have no other course but to speak openly and freely about the situation in which we find ourselves, and to explore what means we still have at our disposal to curb the forces that our own leaders, from 1945 on, all too confidently and carelessly set in motion.

If I flinched from taking on this duty, I should be unfaithful to my vocation as a teacher. There is no 'disaster shelter' for the mind, in which the American scholar can take refuge, to cower in darkness and shameful silence, protected from the poisonous fallout of public error. The worst dishonour possible would be to remove our minds from the full light of day, and to withhold from our countrymen our most valuable human resources: not merely our specialised critical intelligence, but our imaginative insights, our moral evaluations, our historical perspectives, our prognostic anxieties.

The public task that has fallen to me is one I would gladly have evaded, if peace of mind could be purchased so cheaply. More than once during the last 16 years I have found myself wryly sympathising with the Biblical prophet Jonah, who fled from his unpleasant duty of announcing to the people of Nineveh that, unless they altered their conduct, they were headed for destruction. And I am still envious of Jonah's good fortune, not just in escaping the tempest and the belly of the whale, but in living to see the words he so reluctantly addressed to the inhabitants of Nineveh heeded by everyone, from the king and nobles down: so that 'great city', though it contained six score thousand people who couldn't tell the difference between 'their right hand and their left', was saved, along with much fine cattle.

The only thing that lightens my burden today, my sole support and consolation, is the conviction that I shall be uttering, to a far larger degree than anyone would suspect from reading the newspapers or listening to the radio, the thoughts that millions of other people, our own countrymen and our neighbours all over the world, are now thinking in anguished silence, still unheeded by their leaders. All this last month, I confess, I have been going about my work from day to day, haunted by a few lines that come near the end of the most heart-breaking of Shakespeare's tragedies, *King Lear:*

> The weight of this sad time we must obey,
> Speak what we feel, not what we ought to say:

And in that mood I face you.

Let us go back to the beginning. Half a generation ago, our country found itself in sudden possession of almost illimitable physical powers and potentialities, derived from scientific insight into the ultimate constitution of matter. By a chain of brilliant experimental investigations, in which this university, through Professor E. O. Lawrence's laboratory, played a distinguished part, the technical means of transforming mass into energy were invented. Potentially, this marked a human advance comparable only to that which the neolithic domestication of food plants and animals had brought in. But instead of being applied, like that older technical triumph, to the enhancement of human life, the new powers of nuclear fission were directed at once to a negative function: large-scale human extermination. The permission to use atomic energy turned into the compulsion to use atomic weapons, against present or future enemies. This fixed idea still dominates us.

Unhappily for mankind, the release of nuclear energy had been preceded by an even more devastating kind of liberation: a release from moral inhibitions and salutary taboos it had taken civilised man four or five thousand years to build up. Three years before the atom bomb was invented, our own country, along with our democratic partner, Britain, had adopted the totalitarian strategy of attacking not only identifiable military targets but numerous inhabitants of whole cities, doing what the Germans had done, to our own well-justified horror, in their assaults on Warsaw, Rotterdam, and London. This wilful breakdown of mankind's well-established safeguard against insensate violence, this transformation of war into genocide, turned every country into a potential extermination camp. Though we covered our actions with the specious excuse that such wholesale extermination would shorten the war and thus save precious human lives, our government actually placed every human life on this planet in jeopardy, as soon as atom bombs went into mass production. We must now face the consequences of these tragic errors.

I do not purpose to examine the many sins of commission and omission that have, from this starting-point, brought us into the present desperate situation. Suffice to say that massive errors were committed – and are still being committed – by both our own country and Soviet Russia, the principal offenders. Both governments quickly became the prisoners of the absolute weapons they were creating; and these weapons in turn brought into existence a host of scientific, technical, industrial and political agencies, whose many members acquired a heavy vested interest in the strategy of extermination, and had no economic or personal incentive to seek an alternative strategy and policy. The food that most of mankind now eats has been poisoned by the mere testing of these nuclear weapons; but the moral atmosphere has been even more heavily contaminated.

In their reliance upon weapons of genocide – nuclear, chemical, bacterial – both the United States and Soviet Russia have been equally at fault. Today, in consequence, both countries symbolise the dilemma of the irresistible force confronted with the immovable object. Neither government will yet give ground, even on trivial issues like those raised in Berlin. Each still threatens the other with unrestricted extermination and destruction, despite the fact that the same catastrophe would be visited on both sides, and would eventually do grave damage to every other people on the planet, no matter how innocent or remote. The notion that there is some neat technological way out of this impasse forms part of the strange pathology of our time. Plainly every new mechanism of death invented by either side only heightens the present tension, widens the prospective terror, and commits them more heavily to the universal catastrophe they profess to abhor but do not shrink from projecting.

Our own country has declared its readiness to sacrifice 50 million of its own citizens to our Nuclear Gods on the first day that genocide breaks out. We have covered over that first appeasement of these demented gods by building wholly illusory underground shelters, designed on the quite indefensible assumptions that only military targets would be hit, only nuclear weapons would be used, and – most fantastic assumption of all – that the conflict itself would last only a single day. At

best, our peripheral fallout shelters would provide an extra fortnight for contemplating the traumatic horror of facing the continuance of a purposeless war, and lingering on, wracked by disease and starvation, in a meaningless world, disintegrated and permanently defiled beyond power of redemption.

To accept such an abomination of terror and desolation as even a remote possibility, much less an honourable and tolerable sacrifice, is sheer madness; and the fixed policy that will eventually lead to such an end is, by any rational criterion, a mad policy, empty of human values and unworthy of human respect: the policy of under-dimensioned men with 'ten year old minds', operating within a one-generation frame of reference, with no respect for the values of human history and no concern for the future of the human race. Let us face these consequences before our leaders commit us further to this unpardonable sin, to use Hawthorne's words, this ultimate crime against mankind itself. And let us speak plainly to our leaders to this effect: we hold these truths to be self-evident, that there is no national purpose, however ideal, no practical urgency, however pressing, that would justify the risk of bringing about the irretrievable mutilation of the human race and the nullification of human history.

From this it follows that we must swiftly change our minds and alter our rigid policies. There are no alternatives to our present course that our own government should not be prepared to examine, no lengths it should not be prepared to go, no humane proposals it should be afraid to make lest they be treated as a confession of military weakness – in order to forfend even the bare chance of such a fatal terminus. If we are to overcome the irrational factors that are increasingly driving us into a corner out of which they threaten to break only by a final irrational act, we ourselves must take the lead in rebuilding the moral foundations we ourselves thoughtlessly demolished, and challenge the premises that have brought us to the verge of accepting this gigantic aberration as a normal intelligent choice.

More than that: we must not merely repair our own morals but improve our manners. At such a hair-triggered point as this, the persistent public baiting and taunting of the Russian government and the communist system by our leaders only betrays their incapacity to come to grips with reality: the reality of Soviet Russia's existence, the reality of the world's need for their willing consent and co-operation in the enterprise of ensuring mankind's survival and continued development. The fact is that we need the help of the communist peoples, as they in turn need ours, if we are to escape the death trap each nation has cunningly set for the other.

Only one course is now open to us: to retrace our steps and seek a human way out. What, then, does it mean to be human? To be human is to recognise, as even the most primitive tribes recognise, that we are all part of a cosmic process that encompasses and outlasts our little lives. As living organisms we are members of a complex, co-operative society that includes species at every level of development, from the viruses and bacteria to the most fully developed human personalities, a Confucius or an Emerson, an Aristotle or an Einstein. As families or nations we live not alone or on our own exclusive terms, but with the constant help of countless other species. Wantonly to break apart this complex web of organic life and human culture at any point is to assault the foundations of our own existence. Our security and our welfare rest upon mutual aid and mutual tolerance. And when we are fully human, the entire human past and future are constantly present in our consciousness, to deliver us from insolent fantasies based on the prejudices of our tribe and the discoveries of a single generation.

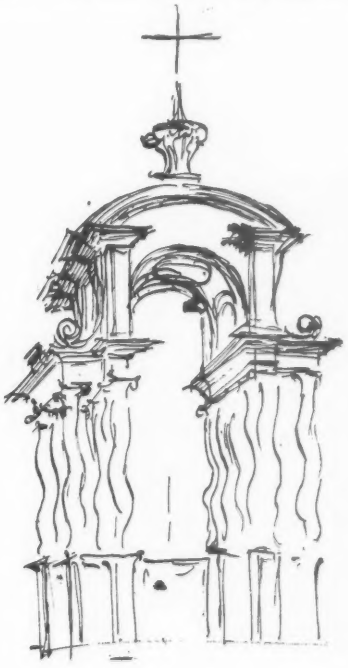
To be human, by the same token, is to recognise with humility our own inherent imperfections and limitations. At every moment, as Christian doctrine has always stressed, men are prone to sin and error, to hallucinations, self-deception and headstrong pride. All men individually, and all nations collectively, are finite and fallible beings; and they are never more open to flagrant error than when they feel smugly self-righteous and immune to any possible criticism. Traditional wisdom warns us against these flattering illusions. Though we may make our little daily decisions alone, knowing that our mistakes will hurt only ourselves, now that our leaders persist in committing us to policies that might eventually bring disaster to all mankind, we must recall them to their human conditions: they need the historic wisdom of the race, and the criticism and correction of all other peoples, and above all they need to restore their own balance by bringing back into the picture the human factors they have blindly ignored.

Only if we operate once more from a humble human base will the problems that now seem insuperable become open, step by step, to a human solution. There are many alternatives to the course that the western nations have been following these last 16 years: there is still an abundance of open choices, accommodations and compromises, midway between the hateful extremes of one-sided surrender and mutual extermination. But the time is late, and the dangers multiply day by day.

Since only the human way out remains, the most imperative task for us as Americans is to summon forth and patiently cultivate sufficient friendly human feeling in ourselves to evoke a similar response in our opponents. The belated proposals that both the Russian and the American governments have made towards total disarmament will not move an inch toward realisation whilst our governments meet each other, filled with hostility, suspicion, and bravado, poisonous qualities that derive directly from their confidence in the very weapons that must now be destroyed. The human break-through must preface every serious governmental effort; and the first change in the atmosphere, the first melting of inflexible power into supple wisdom and humanity, must be made by each of us, opening our hearts as well as our minds, and speaking freely, as I have been speaking to you.

Let us speak truth to the power that can only will its own destruction. Let us tell our leaders that this is not a time to threaten desperate, irretrievable acts, but to utter disarming words: words that will sympathise, conciliate, heal, embrace: words that will pave the way to honourable compromises, and eventually, passing beyond the ensurance of coexistence, will bring about positive co-operations. At this point, only the quick therapy of words, meaningful words, openly and honestly exchanged, as in a direct face to face relation, can free us from the grim tensions and compulsions that now have us in their grip. 'The weight of this sad time we must obey.' Yes, the time has come to speak, and to say what we feel; for what we feel in the depths of our being is precisely what we ought to say: we have no commitment to catastrophe.

(*Sir William Holford reviews Mr Mumford's latest book on page* 552.)



BASA Interim Report 1961

The British Architectural Students' Association last month brought out and circulated its first major publication: 'An Interim Report on Architectural Education'. The report covers a number of BASA Conferences prior to the recent one at York, which will be the subject of the next publication.

The policy adopted at the conference held in September 1960 at Oxford, which defines BASA's general attitude to education, forms the subject of the introduction and conclusion of the Interim Report. These sections are given below.

INTRODUCTION

BASA (The British Architectural Students' Association) was born of deep dissatisfaction springing from within the schools themselves. Founded in 1957 by three students at the Liverpool School of Architecture, it now has a nation-wide membership of almost 2,000. From its inception architectural education has been its main motivating interest. To BASA members it is fundamental that there must be a connection between the banality and general insensibility of contemporary architecture to social and environmental responsibilities on the one hand, and on the other the superficiality that exists in the schools.

The two most recent conferences analysed the causes of dissatisfaction in an attempt to turn aggressive dissent into creative advantage. Basic shortcomings were listed as follows:

1. Criticism of schemes based more often on presentation than on consideration of fundamental solutions.
2. Schemes based on schedules of accommodation with no client, no actual site, few restrictions and only superficial guidance from studio supervisors and therefore giving little or no training in appreciation problems in any fundamental way.
3. Lectures given and attended for the sale of 'potted' notes to be reproduced almost verbatim at examinations.
4. History, theory of design, structures, technical subjects, etc., treated in lecture-courses as separate subjects, with little sense of their central and creative integration in the formation of a building.
5. Lack of proper participation in student projects by engineers, quantity surveyors, and trades in the building industry.
6. Insufficient importance attached to the technique and practice of analysis and ordered thinking.
7. Lack of training in apprehending and defining changing social and environmental values as the vital motivating factors in solving any architectural problem.

But to most people at these conferences, lay the need for a wholly new and dynamic policy in architectural education. This was expressed at the Bristol Conference (January 1960) as follows:

ARCHITECTURAL EDUCATION SHOULD STIMULATE THE STUDENT TO EVOLVE A PHILOSOPHY RELATED TO THE HUMAN PROBLEMS OF A SOCIETY IN CONTINUAL EVOLUTION, AND TO REALISE THIS PHILOSOPHY IN THE TECHNICS OF HIS TIME. THIS IS THE ONLY BASIS UPON WHICH HE CAN DESIGN WITH CONVICTION AND INTEGRITY.

CONCLUSIONS

The worthiness of criticism is in the constructive alternatives that are proposed. BASA has realised the validity of this in short-term proposals (which could be implemented immediately within the existing fabric), and also more fundamental long-term objectives.

SHORT-TERM PROPOSALS

These cover teaching method; standard of entry; graduate research; staffing; school facilities.

Teaching Method

Aim

Teaching method must bring out the best in each individual student. It must make him constantly and deeply aware of his environment and of his own individual creative capacity to contribute to its evolution.

Teaching method must encourage clarity of thought and the ability to express sequences of ideas clearly – graphically, orally and in writing. Analysis involves the review of all relevant facts and the assessment of their proper significance. It is one of the essential disciplines without which architecture will fail, yet schools approach analysis almost entirely empirically. (Report of the BASA Conference, Bristol, 1960.)

Teaching method must encourage creative work *for its own sake, and not in competition with others*; it must be capable of dealing with the individual capacity, and the varying speed of any student's personal development, and it must assess his ability and promise in these terms.

Teaching method must encourage those disciplines and thought processes in which the exercise of technical virtuosity and invention may be integrated with a clear understanding of human, social and psychological needs.

Implementation

Both the Bristol and Oxford conferences found that these aims could be realised through a tutorial system in which small groups of no more than, say, five students would work with a tutor in informal discussion on a sequence of problems concerned with specific programmes.

At Oxford, specific changes were formulated.

Old System	*New System*
Standardised, synchronised	Work emerging from the individual's vital interests – whether realised or revealed by stimulation from his tutor and fellow students – and geared to his capacity, co-operation and speed of development.
Superficial, repetitive 'crits' given to a whole year	Continuous individual criticism of all aspects of the work throughout the whole process.
Marking on final product alone – the drawings or 'scheme as presented'.	Assessment based on the individual student's thought and work process *throughout* the scheme, as a development of awareness ending in the achievement of a final form.
Isolated, standardised lectures, meant to cover the whole field in any particular subject.	Tutorials relating the content of minimal lectures, through discussion, to the specific studio programmes in which work is in progress at the time.
Acquiring 'potted knowledge' and 'know-how'.	Acquiring methods of approach and powers of analysis, synthesis and communication.
'Failure' based in most subjects on memory examinations alone.	Elimination through lack of initiative or unsuitability in the work as a whole.
Choice between ill-equipped studio, and (socially and intellectually) barren study at home.	Accommodation and equipment mobile and adaptable to give privacy or company as required.
Stereotyped solutions: 'recipes of success'.	Creative enthusiasm on the part of individual students accorded serious encouragement and understanding.

These new methods and new attitudes would result in a more flexible and adaptable system, freed of regimentation of the present schools, encouraging self-discipline through close contact with the staff, and demanding a new approach and higher standard on the part of both staff and students.

Standard of Entry

Concern was felt at Oxford that the new level of entry of two advanced and five ordinary level subjects, although a better guarantee of intelligence and maturity, constitutes too specialised a minimum standard.

It was recognised that the new entry level was partly adopted to fall in line with the demands of the present university, grammar and public school requirements, but for architecture it may be desirable to accept and demand a less specialised standard of entry. Essentially architecture is both art and science. It is, therefore, necessary that prospective architectural students should be able to study both these arts and science subjects at school. In any case, standards of entry should be thought of not in relation to 'University Levels' as an abstract generalisation, but specifically in relation to the aims of a new and more responsible architectural education; in other words the 'aware' and 'sensitive' student is more valuable than the academically 'sound' student.

Entry standards and the assessment of a student's suitability for architecture will be further discussed at future conferences.

Graduate Research

Aims

1. Research will provide the basis from which correct design decisions can be made.
2. By carrying out research, schools will take their rightful place as the spearheads of architectural thinking.
3. Experience in research can help the architect to achieve methods of ordered thinking.

Implementation

BASA recommends that the following courses of action should be initiated by the RIBA.

1. A broad framework for post-graduate research should be initiated defining objectives, with emphasis on research into environmental needs. Particular attention should be given to the part architects, sociologists, economists, scientists, etc., should play within this framework.

2. Research should be co-ordinated by:

(*a*) Establishment of relations with schools and research departments so as to ensure that the research has direction within the framework and that duplication is avoided.

(*b*) Collection and publication of research material and circulation to all schools of detailed information on material available.

3. Research fellowships should be established by tapping all the sources of funds available.

Staffing

Standard and numbers of staff must be improved. To this end:

1. Programmes of research should be established; the case would thus be greatly strengthened for the increase in numbers of staff in schools without which any educational reform can be only partially successful.

2. Courses should be established, similar to those held at the York Institute of Advanced Architectural Studies on problems of research, teaching method, assessment of ability, etc.

3. Conferences should be held at which a cross-section of staff and others can regularly discuss educational problems.

4. There should be active lobbying for the improvement of staff salaries.

School Facilities

BASA has set itself the task of initiating a campaign to improve school facilities. The first move in this campaign is a comprehensive questionnaire, to discover exactly how schools are equipped with libraries, studios, workshops, student facilities, etc. The information collected will contribute to a report designed to show whether and to what extent lack of facilities affect the efficiency of teaching, and to suggest minimum standards of space and equipment for schools of architecture.

The report will be used to influence the RIBA to show leadership in persuading local and central government and industry to invest more money in architectural education, particularly in view of the fact that building accounts for a third of the national investment per year and that, therefore, the country cannot afford to neglect the training of the architect.

LONG-TERM PROPOSALS

The Oxford Conference emphasised in particular that the most important factor in the progress of architecture is the development of vital theory.

How is this to be done? The Martin paper – 'An overall view of the architect's training' – was the most influential of the Oxford conference; and the discussions following it made it clear that almost every student delegate present opposed the prevalent system of training which aims at producing the one-off, *prima donna* architect.

'It is, of course, very important that there should have been a Ronchamp, an IIT Campus and a Saynatsalo. These are individual masterpieces of architecture in the traditional sense. They are the unpredictable achievements of genius. They each achieve uniquely a new balance between form and technical standards and a new consideration of human needs and environment.

'But in contrast to this and in magnitude completely obscuring and overwhelming these isolated buildings there are stark evidences of deterioration in every aspect of our environment. Cities which once worked, no longer do so. They are destroyed by a redevelopment and expansion which adds up to nothing more than an operational and visual anarchy.' (Sir Leslie Martin)

The Conference affirmed that the architect must lose his status as a studio-artist making buildings as separate, site-defined art-objects. A scheme of education was needed, rooted in the primary focus of human and environmental need and responsibility, and not in form/style.

'I am suggesting that the object of education is to study the form of our environment. Few problems could be more complicated, more diffuse or more overloaded with prejudice. Furthermore, a subject of this complexity cannot be studied by architects in isolation, it must be shared by others, sociologists, economists, historians.' (Martin)

This restatement in the contemporary context of the Gropius/Bauhaus idea of teamwork, however, did not, to some members of the conference, go anything *like* far enough. They saw that in the present situation a new approach to architecture would have to emerge – one starting more humbly and immediately with ordinary human needs, scale and association, than with the more impersonal concerns of form and physical function.

The technics, prefabrications, light and strong materials, demand a kind of architectural use which will respond to societies and environments entering ever more rapid cycles of evolution. The character of an 'architecture of change and flexibility', its aesthetic, human and environmental aspects, will form one of the key subjects of the next conference in the summer of 1961.

The next BASA Conference will be from 4 to 6 January 1962 in Sheffield.

Book Reviews

The City in History

By Lewis Mumford. 9½ in. xi + 657 pp. + 64 plates (with commentary). Secker and Warburg. 1961. £3 10*s*.

Our most recent Royal Gold Medallist, Lewis Mumford, before coming to the RIBA in June of this year, had already published in the USA (Harcourt Brace and World) his most monumental work *The City in History*. The book has now been published in this country by Secker and Warburg. Lewis Mumford undertook, nearly three years ago, to revise *The Culture of Cities*, which had become, since its publication in 1938, a kind of idealistic code of practice for architects and town planners and a source-book for amateurs of cities – including garden cities – all over the world. The more he thought and travelled towards this revision the further he moved towards a rather different kind of book. So although parts of the four historical chapters of *The Culture of Cities* are ingredients of his latest work, they have been assimilated and mixed with so much new material that the flavour of the whole has been altered.

Undeniably the new book is long and wordy and to some extent repetitive. Its length is justified by its range. Lavedan's *Histoire de l'Urbanisme* is even longer. Unwin, Abercrombie, Poëte, Pirenne and most other writers in this field have either a more specialist approach to the subject or a limitation of period. As to wordiness, this is partly the result of socio- and technological definitions which are working their way from jargon towards scientific and literary precision. We just do not have simple and precise words which are accepted as accurately defining such things as residential density or the conurbation. Partly it is the result of Mumford's continual search for the arresting phrase which epitomises social trends and attitudes. In the process he endows not only the individual city with personality but the whole urban movement at a given time with moral consciousness – or the lack of it. And repetition is, I think, a feature of all reformist and prophetic literature, from the Old Testament to Robert Owen. It is not that the same facts are repeated – there is nothing of that despite the size of the book and the argument; but that the same objective is approached by a hundred different paths. This objective is the return to a sensate and comprehensible city, as part of the rational development of a complete social and geographical region.

For architects this is therefore a reference book *par excellence*. It has a first-rate index and a full and remarkably informative bibliography. More than that it provides a picture of most of the creative urban achievements of the western world, and all the urban defects; and it is written with the kind of critical appreciation which could only come from a man with great architectural perception and sensitivity. This form of writing also requires a certain withdrawal from the orbit of the fashionable art-historians and from the micro-influences which they dissect so expertly. It is a macrocosm of which Mumford writes, and although this gives a little cloudiness to some of his pictures, it does not make his main story less convincing, nor his argument less compulsive.

WILLIAM HOLFORD [*F*]

François D'Orbay: Architecte de Louis XIV

By Albert Laprade. 11 in. 351 pp. + 79 pl. Paris: Vincent, Fréal. 1960.

This is an erudite work, written by the foremost present-day French writer on architectural matters. M. Laprade, a prolific chronicler of architecture (as well as an exquisite draughtsman) writes with logic, commonsense and a great deal of gusto. He is a good writer because he writes from experience, having designed (with distinction) and built many buildings of varied types both in France and elsewhere. It is for his distinction as a practitioner – and let us stress the point, not as a journalist of architecture – that he has been elected to the Institute of France, the greatest honour which can be bestowed upon a French architect.

It is not too much to say that M. Laprade has rediscovered D'Orbay, and has traced with great skill and extensive research his architectural life and influence at the time of Louis XIV. It would appear that many buildings which are the glory of French architecture owe much to the genius of D'Orbay. For example, M. Laprade has established the role that he played in the design of some of the masterpieces of the Louis XIV period such as the Palace of Versailles and the Louvre Colonnade.

After reading this book one cannot fail to observe the similarity of situation between such famous architects as Le Vau and Mansart, or even Perrault, and some present-day architects, who, powerful and fashionable, should be credited more for their powers as go-getters and promoters of business than for their virtues as artists. To quote M. Laprade himself, amongst architects and painters the most interesting are not those who meet with success and whose names often appear in the press. They are those who shun publicity and who are devoted solely to creation and their art.

The book is beautifully presented, with an abundance of splendid reproductions of drawings of the 17th century, and deals not only with the life and personality of D'Orbay, but also with his great contemporaries, Louis XIV, Colbert, Louvois. Besides its numerous historical annotations and its many amusing anecdotes, the book constitutes a full exposition of French architecture in the grand manner. The surprising documentary evidence presented by M. Laprade is such that one is bound to be convinced that D'Orbay is the author of many glorious architectural monuments which bear the signatures of other well-known architects of the 17th century.

Now to whom will such a book appeal? The answer is given by M. Laprade himself: to all who delight in the higher joys of study, meditation and creation, and generally to all those really interested in architecture, the professional as well as the layman. Language is no barrier where this book is concerned, as the illustrations themselves provide sufficient food for thought, education and enjoyment. The practising architect will learn a great deal from this book: such comment as the following, written some 200 years ago – 'too fiery an imagination leads to designs which are more extraordinary than well thought out: the masterly and the sublime demand restraint and truthfulness', may apply to current trends. The present-day philosophy of architecture will benefit a great deal by the publication of this book.

H. O. CORFIATO [*F*]

Landscape Architecture

By John Ormsbee Simonds. 11⅞ in. xi + 244 pp., illus. New York: F. W. Dodge Corporation. 1961. $12.75.

'Man, too, is an animal . . . the failure of many an important planning project can be traced to the failure of the planner to recognise this simple fact.'

This book begins with, and constantly returns to the theme of man's unity with nature. It is a book about landscape, but in its most fundamental sense. The relation between topography, space, circulation and texture has seldom been so sympathetically handled and the book is throughout subjective, and notable especially for its appreciation of the intangibles. There is nothing here, for instance, for those looking for information on planting design: no lists of useful trees, or tables of capital cost and maintenance. Instead, the author takes us from the bare bones and innate character of the natural landscape, through all the problems of adjusting that landscape to the needs of man. His chapter on site analysis is practical to a degree: the fitting of buildings to the flow of the ground, the possibilities of re-grading and improvement, are as down to earth as anyone could wish.

Yet all the while, Mr Simonds finds time to look over his shoulder at history, at Japan, at Kubla Khan, or the practical problems of taking a picnic. He takes us, for instance, through the business of building the Villa Gamberaia . . . 'the site was in all ways impossible, and the villa should not be built . . .' and then shows us in detail something we should never forget: the extent to which landscape as well as building is man-made.

Chapter Seven should be compulsory reading for all planners. Analysing the subtleties of a city, with all its sights and sounds and smells and textures, all its irrationalities, Mr Simonds warns us of the dangers of eliminating too much from our great public projects in the name of order and trimness, and thus creating dissatisfaction and unreality.

Apart from its content, moreover, the book is pleasant to read and to handle; the illustrations run lavishly with the text, and one particularly appreciates the contrast between the sparkling, light-hearted drawings and the feeling of repose in most of the photographs.

SHEILA HAYWOOD [*A*]

Landscape Architecture has now been published in this country by Iliffe Books Ltd, price £4 15*s*.

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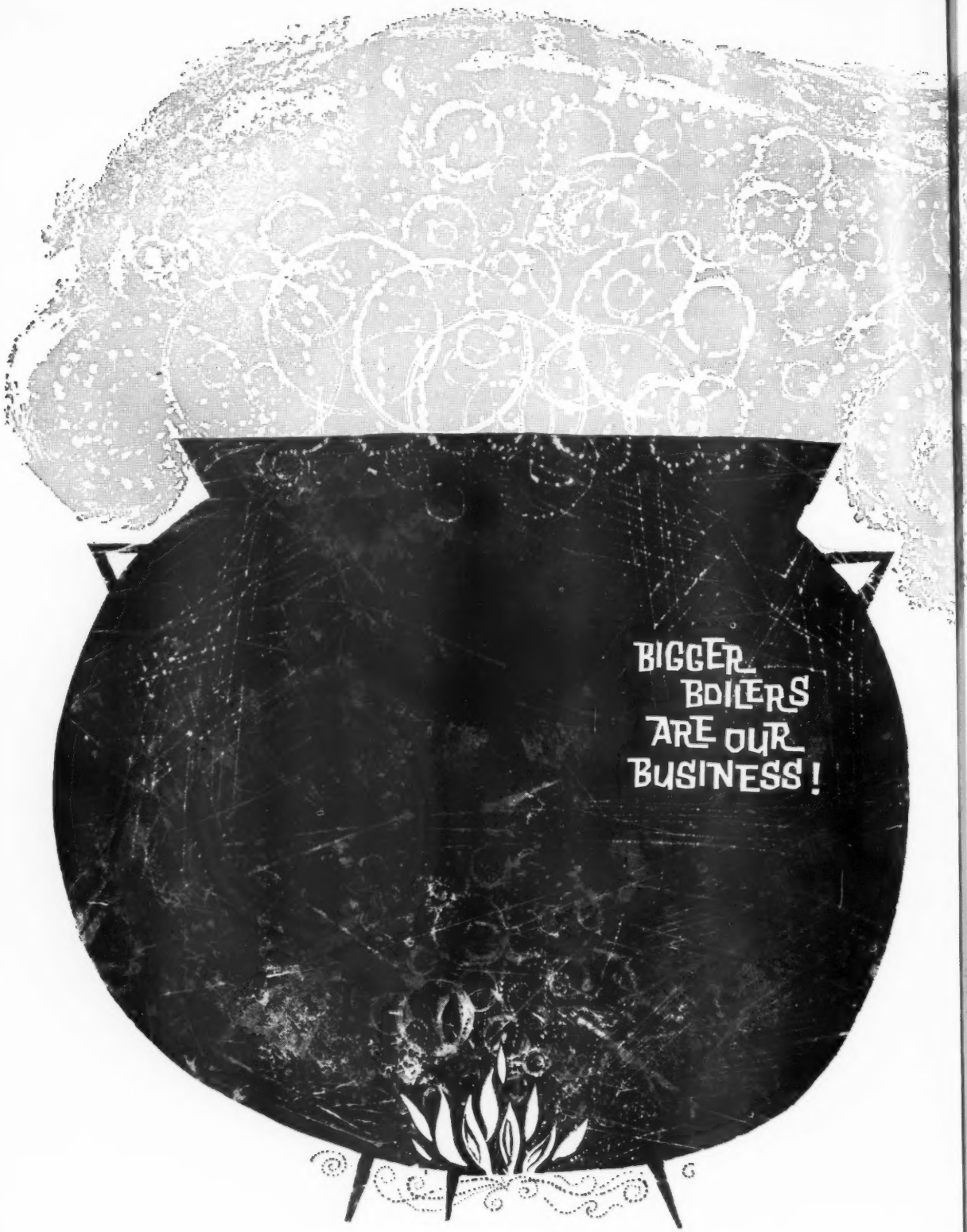
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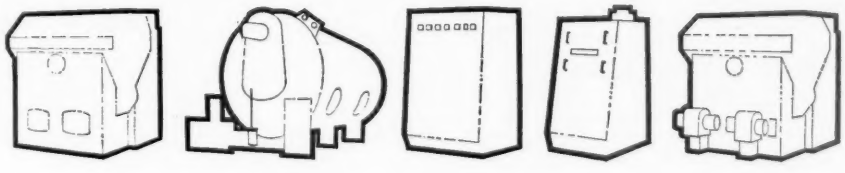

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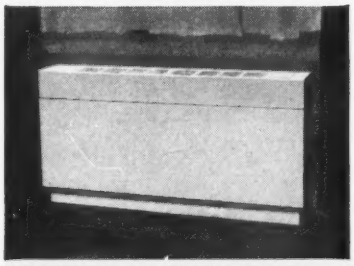

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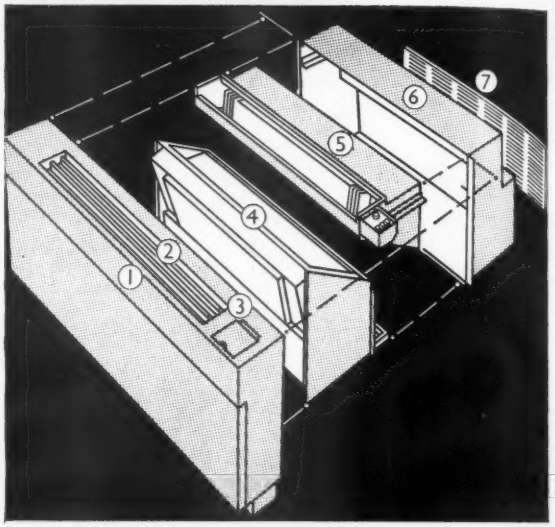

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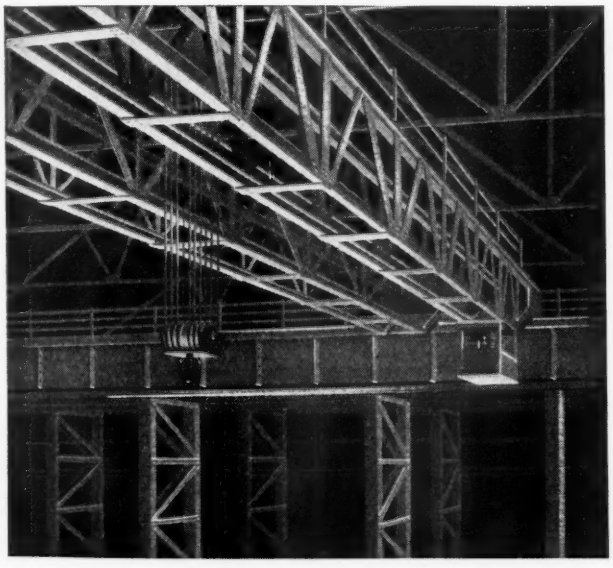

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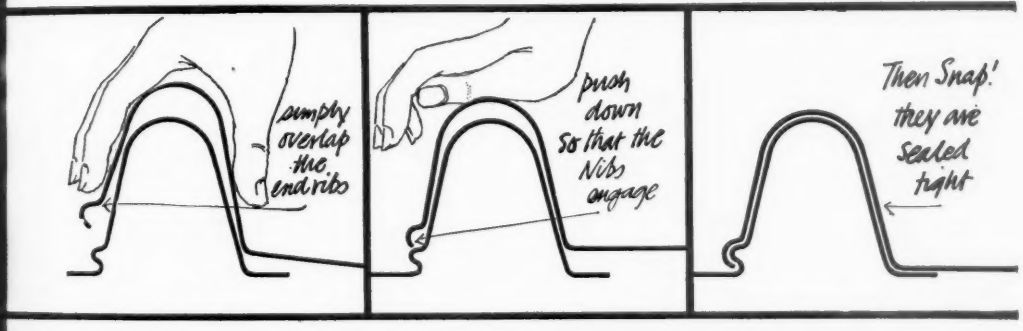

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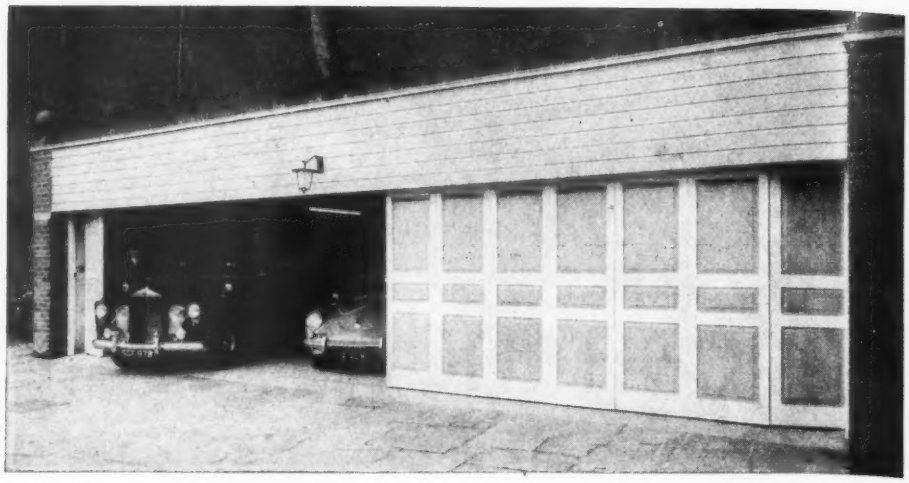

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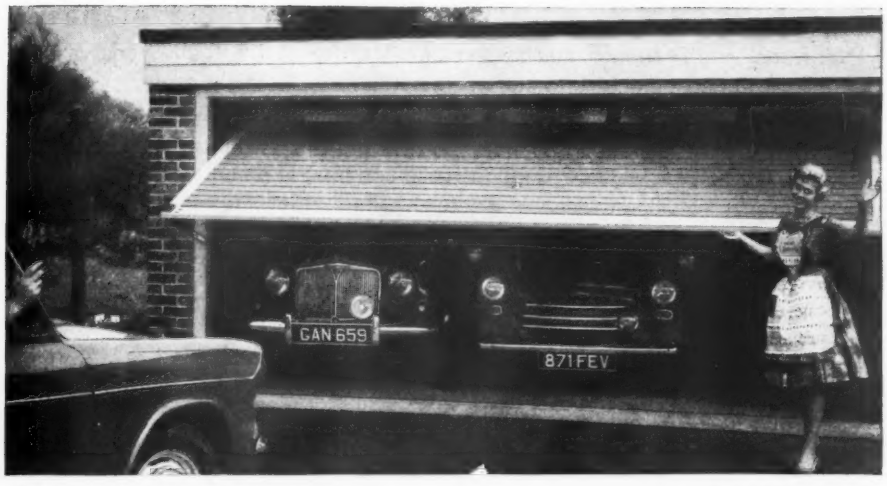

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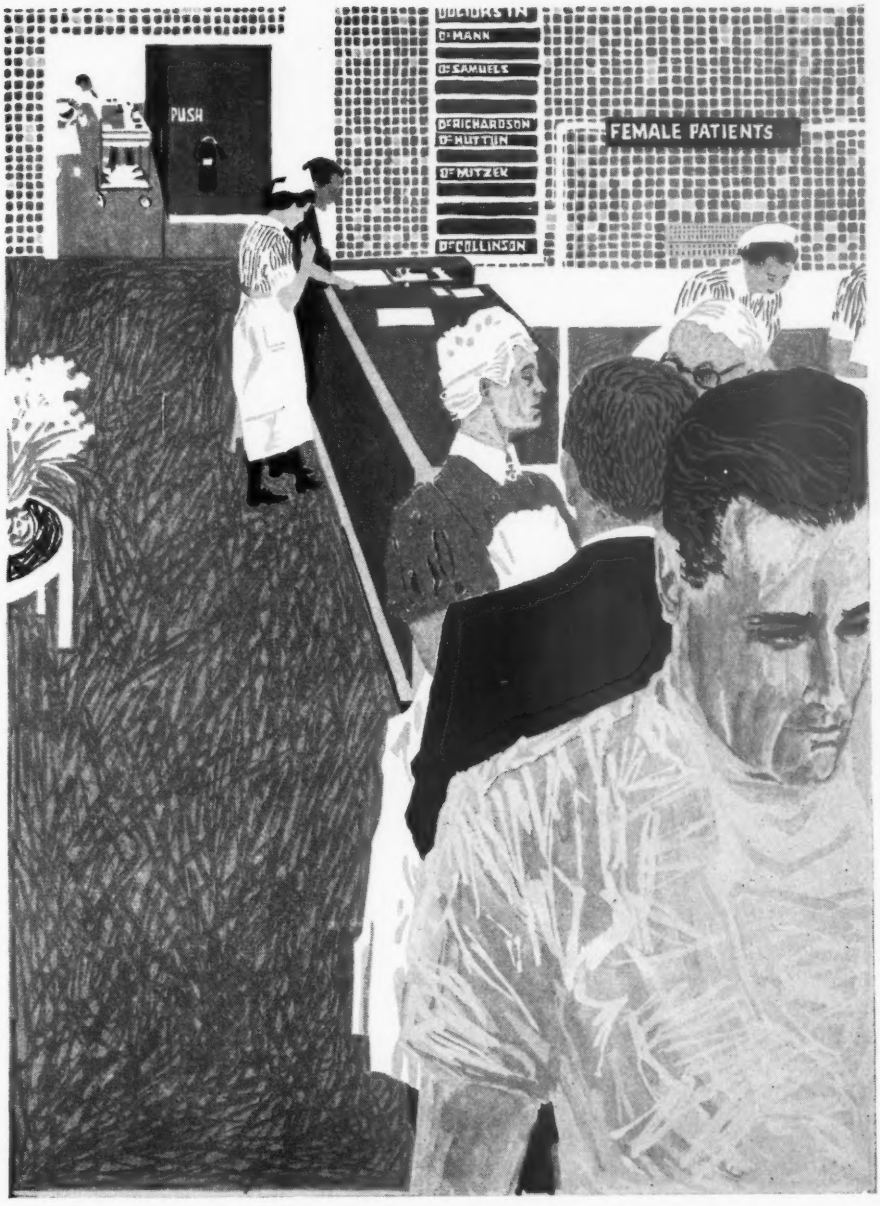

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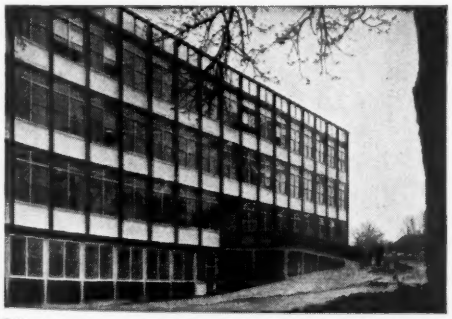

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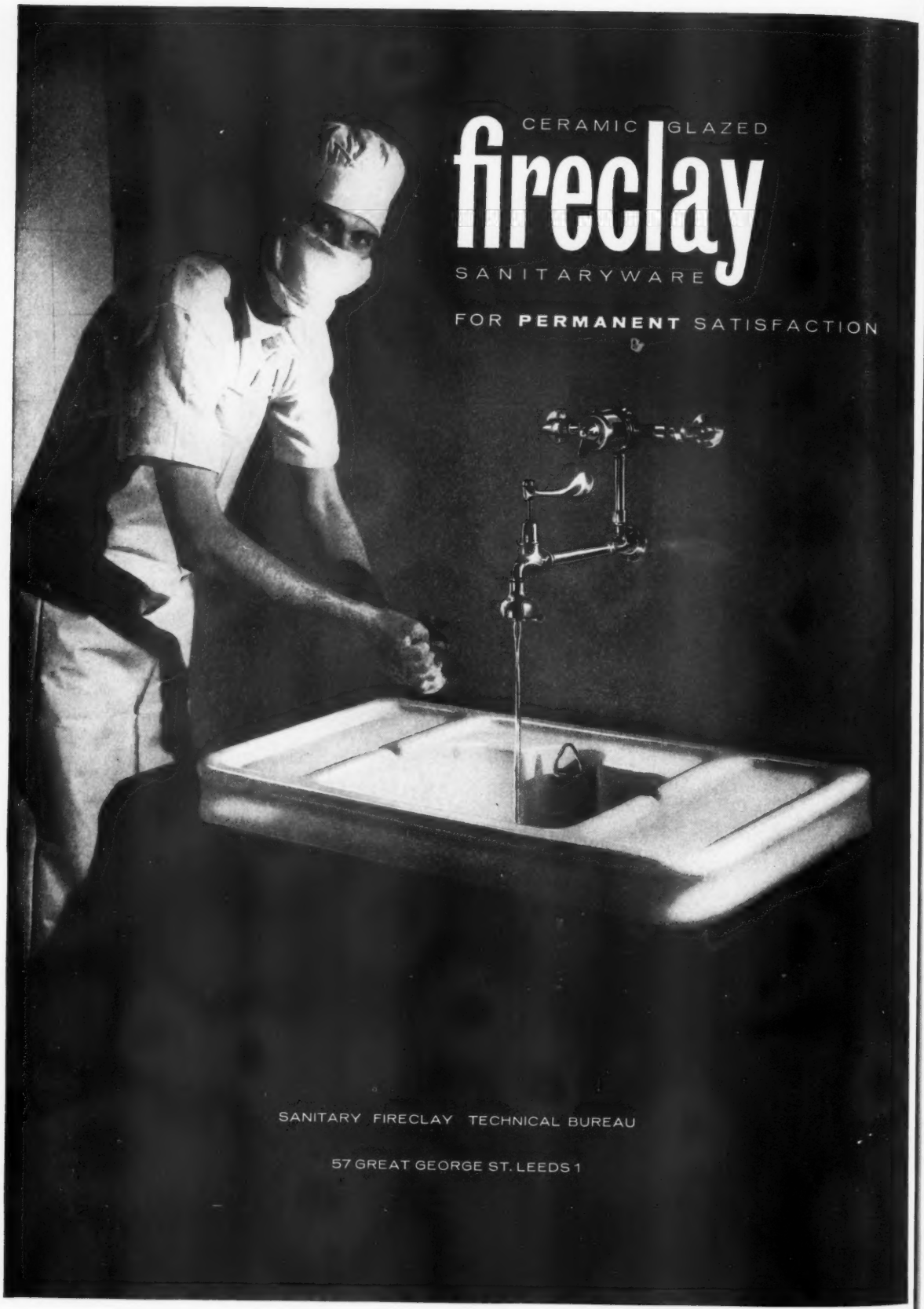
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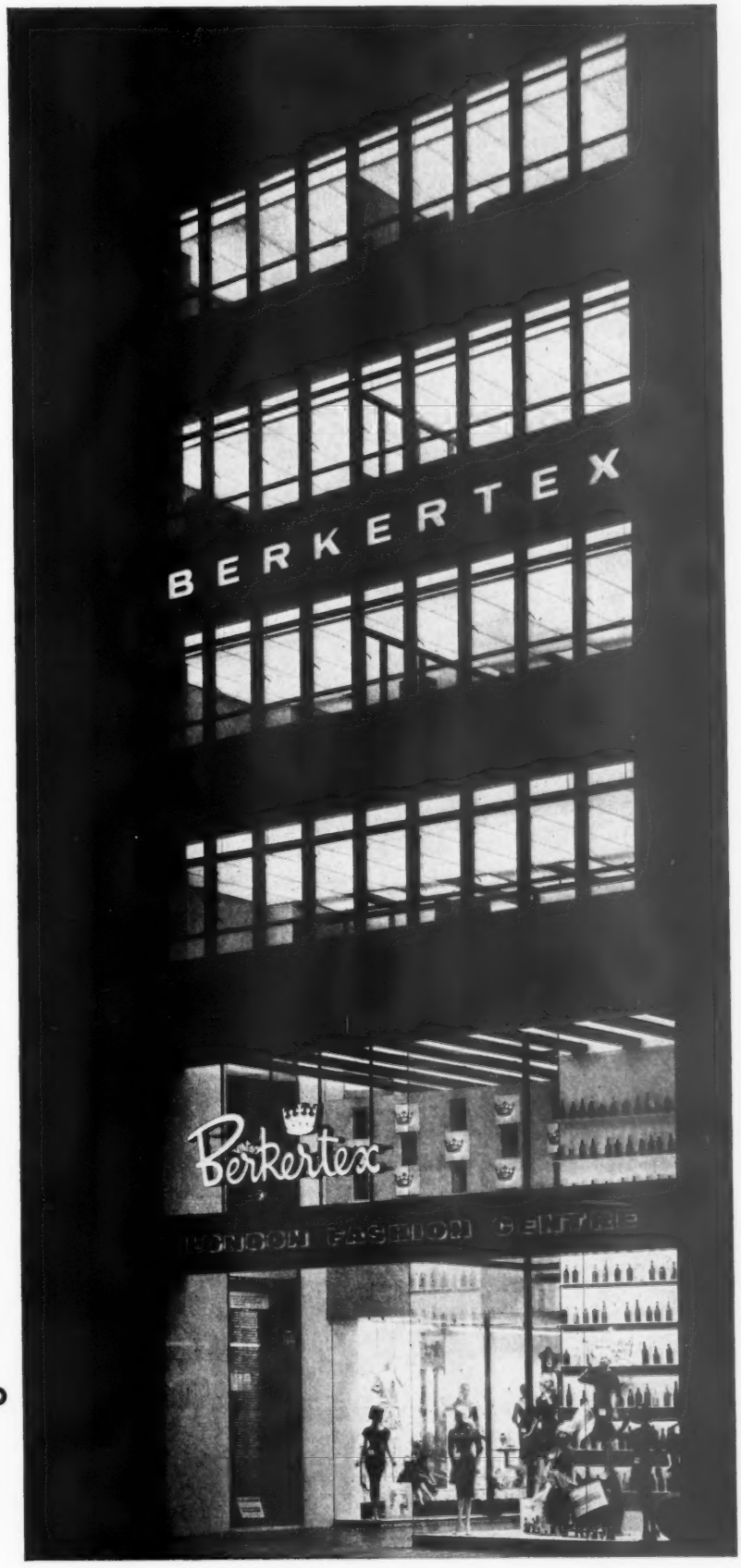

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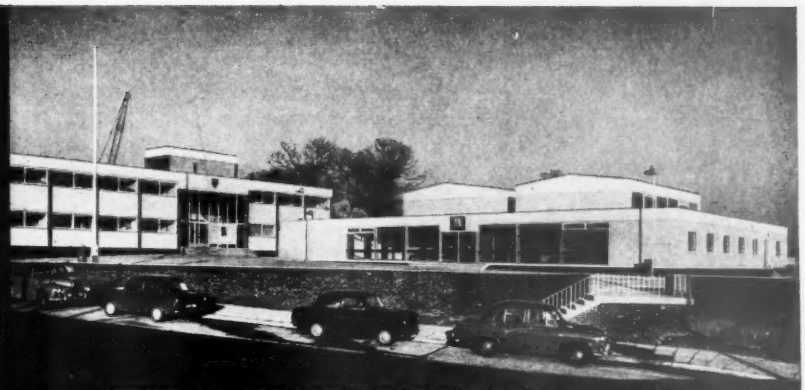
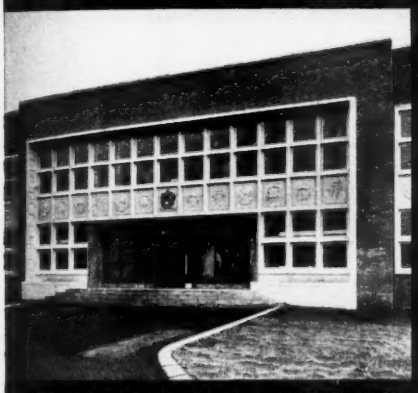
36/38 Fitzroy Square, W.1.
Architects: Wills & Kaula, F.R.I.B.A.



Magistrates Court House and Police Station, Harlow New Town.
Architect: Frederick Gibberd, C.B.E., F.R.I.B.A. —in association with H. Conolly, C.B.E., F.R.I.B.A.

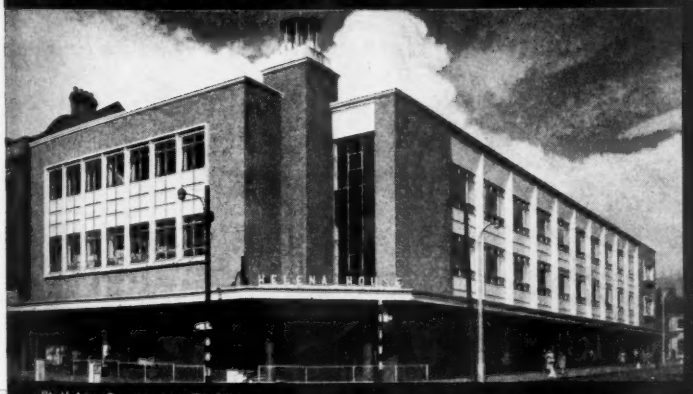
Austin Motor Co. Ltd., Engineers Office Block, Longbridge.
Architects: Harry W. Weedon, F.R.I.B.A., & Partners.

The Mansfield Building Society.
Architect: W. Richardson White, F.R.I.B.A.



University College of Swansea, Natural Sciences Building.
Architects: Sir Percy Thomas & Son, PP.R.I.B.A., A.R.I.B.A.

Multiple Shops, Stevenage New Town.
Architect: L. G. Vincent, A.R.I.B.A., Chief Architect, Stevenage Development Corporation.



St. Helens Co-operative Society.
Architect: G. S. Hay, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society Ltd., Manchester.

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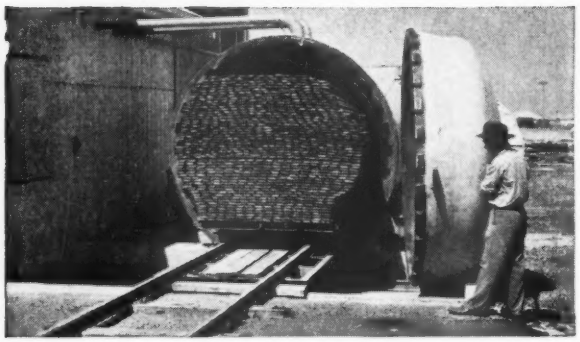

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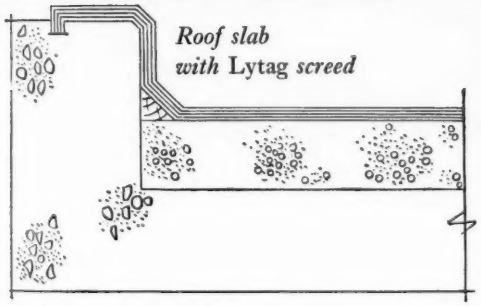
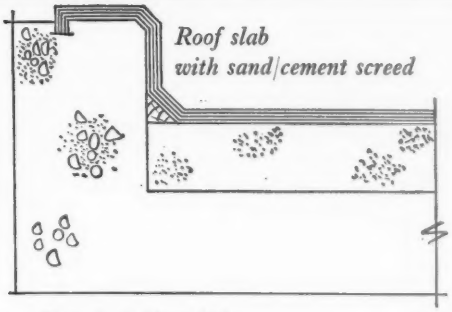


Roof slab with Lytag *screed*

(K= 8·5) ¾″ asphalt
(K= 1·7) 4″ Lytag/cement screed
(K=10·0) 6″ normal structural slab
'U' value=·26
Wt. of screed ft/sup. 21·0 lbs.



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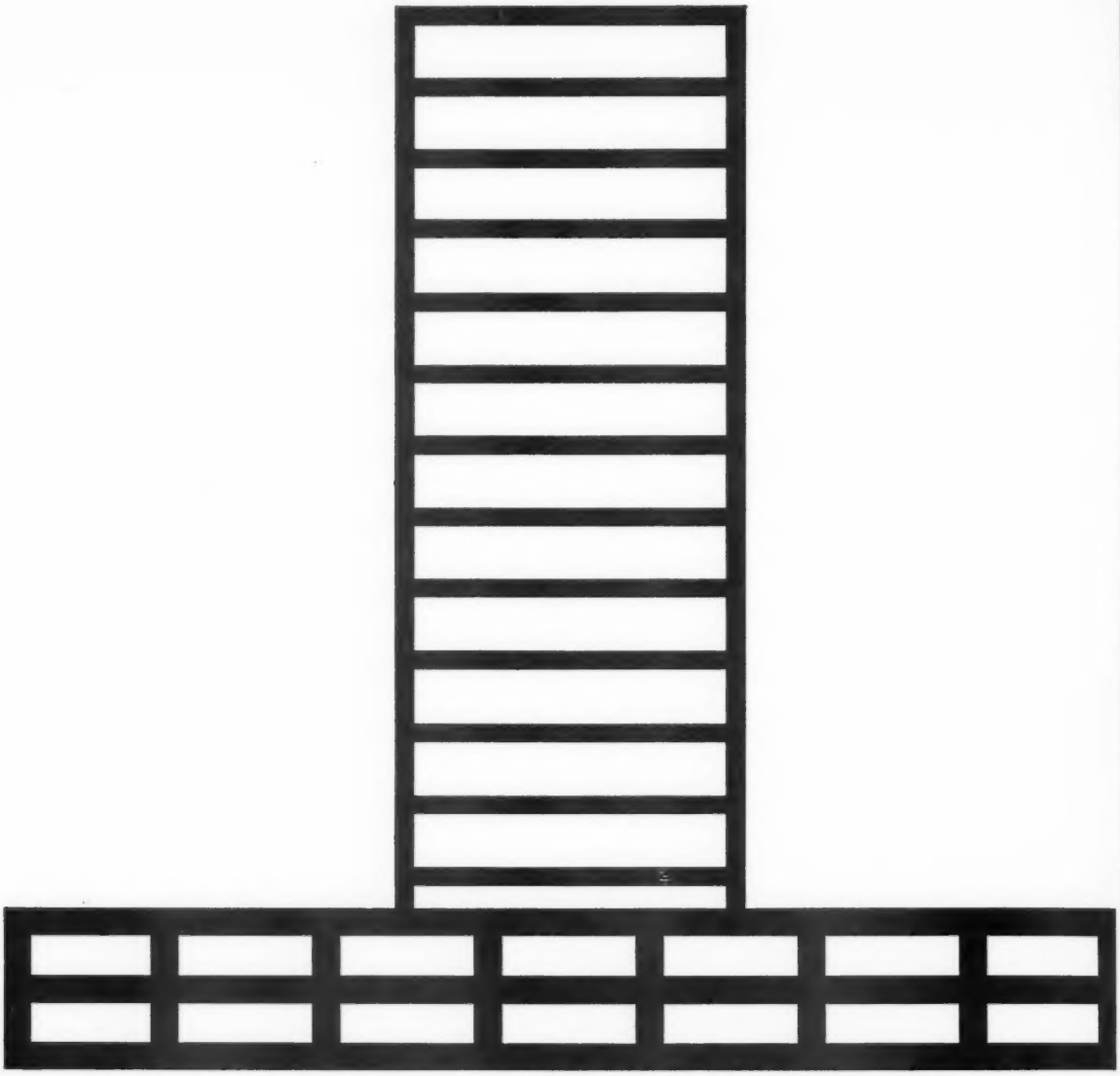

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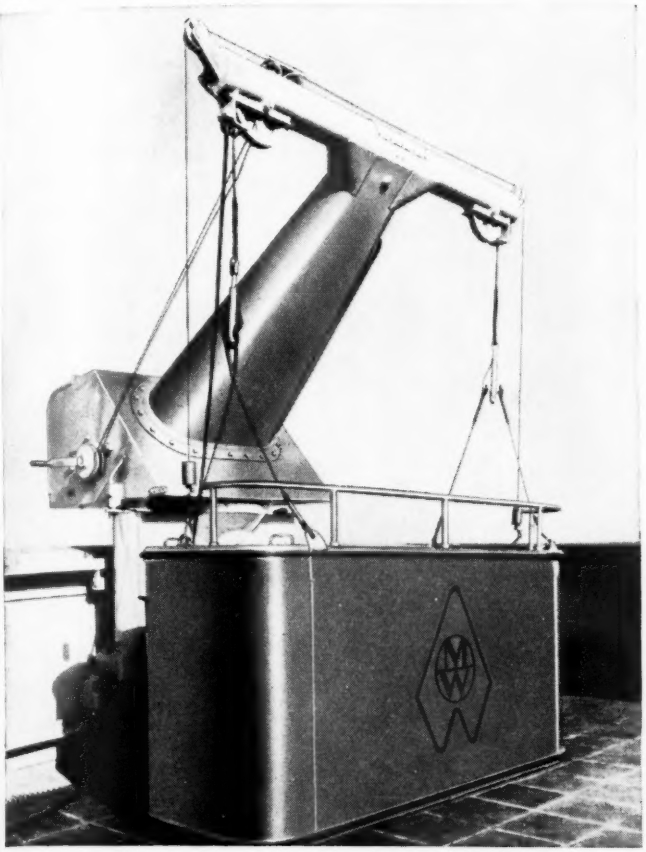

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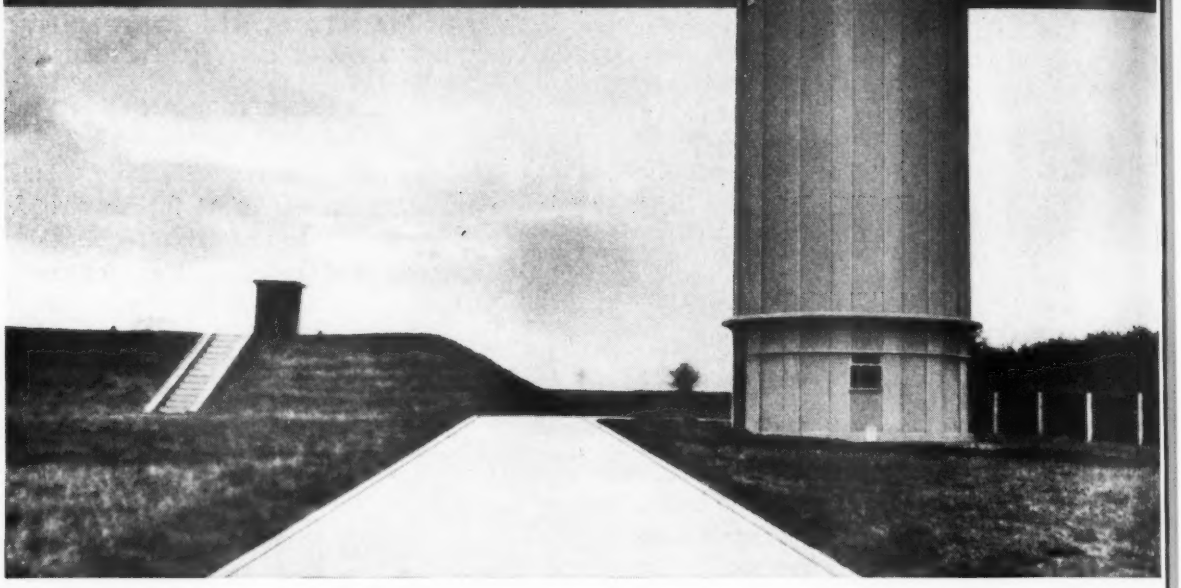

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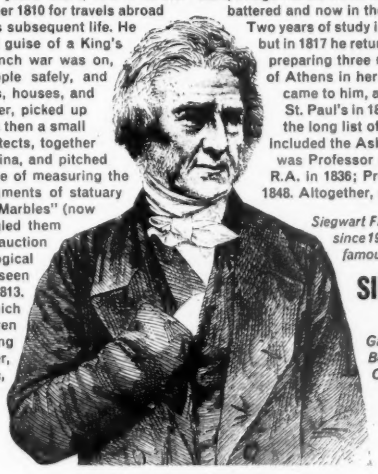
Charles Robert Cockerell *The Greek Revivalist*

Cockerell began his career with the advantages of an orthodox education. This was not surprising, for his father, Samuel Pepys Cockerell, as his name indicates, had Samuel Pepys among his ancestors. So Charles attended Westminster School, and then entered his father's office at sixteen. After five years there, and a further year in Sir Robert Smirke's office, he started in September 1810 for travels abroad which lasted seven years and profoundly influenced his subsequent life. He set sail with £200 in his pocket and in the convenient guise of a King's Messenger, in a Government despatch-boat. The French war was on, but, after sundry scares, they reached Constantinople safely, and Cockerell spent three months there, sketching palaces, houses, and mosques. With another young English architect, Foster, picked up in Turkey, he proceeded to Athens in December. It was then a small and squalid town with no proper hotel. The two architects, together with two German tourists, made a trip by boat to Aegina, and pitched their tents on the island for three weeks. In the course of measuring the Temple of Jupiter there, they discovered various fragments of statuary which later came to be known as the famous "Aegina Marbles" (now in the Munich Museum), and most shockingly smuggled them out of Greece at night, eventually to be bought at auction by the King of Bavaria. Cockerell's other archaeological scoop was the so-called "Phigaleian Marbles", to be seen in the British Museum, which purchased them in 1813. These came from the Temple of Apollo at Bassae, which Cockerell also measured. The lively account of his seven years' journeying in the Levant makes excellent reading for architects or anybody else. His companion, Foster, deserted him for a Greek girl encountered at Smyrna, and there are many other amusing incidents. The commandant of the Acropolis (then a fortress) at Athens offered to give him a souvenir if he would take it away. So he arrived at midnight with a cart, and the commandant pitched down to him, from aloft, a huge marble block forming part of the south frieze of the Parthenon (somewhat battered and now in the British Museum).



Two years of study in Rome, diluted with social dissipation, followed Athens, but in 1817 he returned at last to London. For some time he concentrated on preparing three magnificent imaginative drawings—of Rome in her glory, of Athens in her glory, and of the works of Wren; but a practice quickly came to him, almost unsought. He succeeded his father as Surveyor to St. Paul's in 1819; became Architect to the Bank of England in 1833; and the long list of his buildings from that date up to his retirement in 1859 included the Ashmolean Museum and Taylorian Institution at Oxford; He was Professor of Architecture at the Royal Academy, and was elected R.A. in 1836; President R.I.B.A. in 1860 and its Royal Gold Medallist in 1848. Altogether, a distinguished career.

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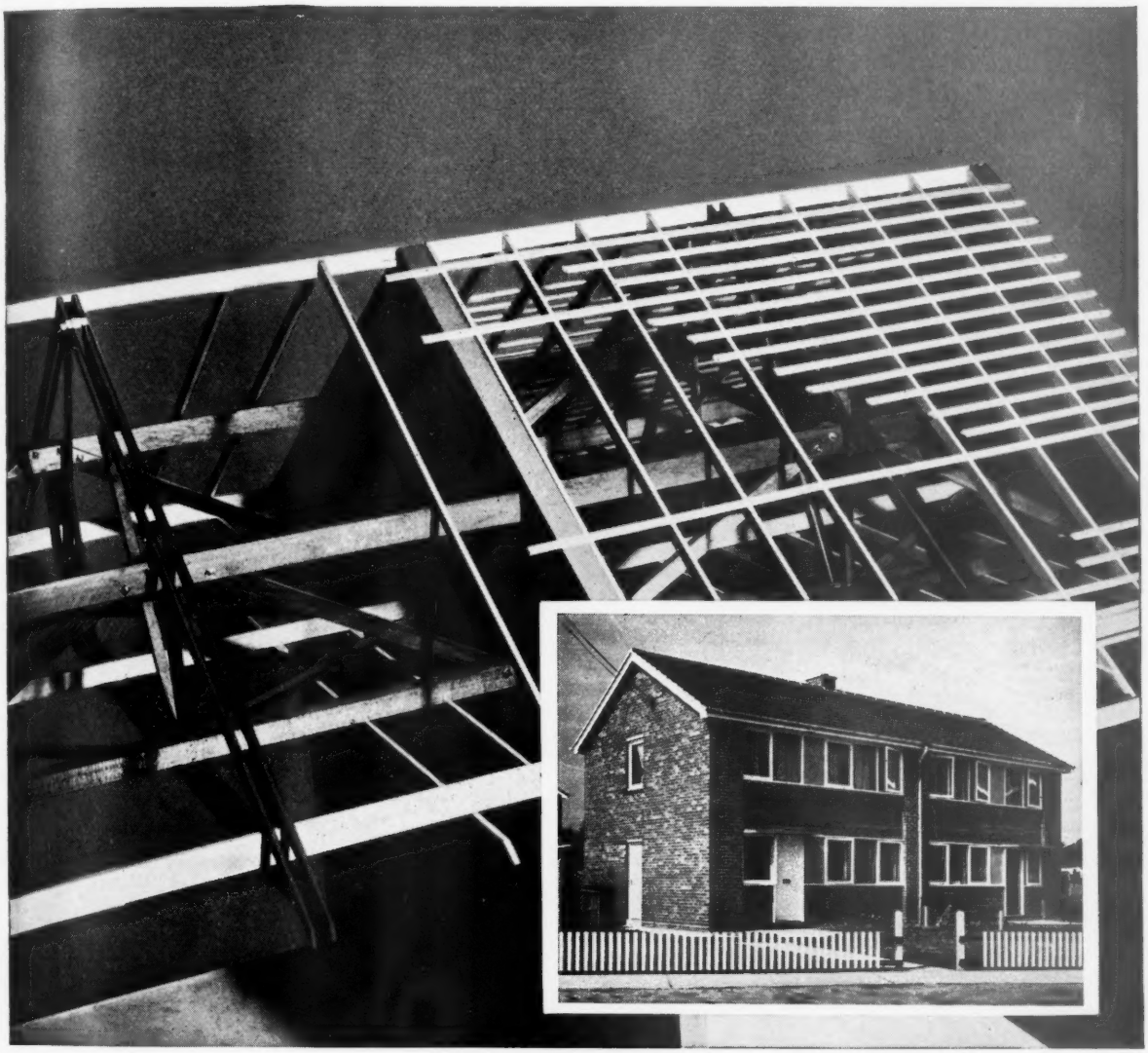

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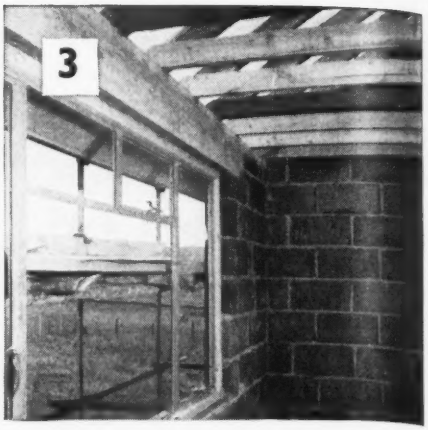

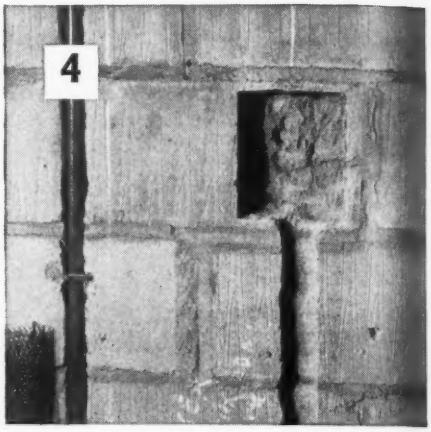

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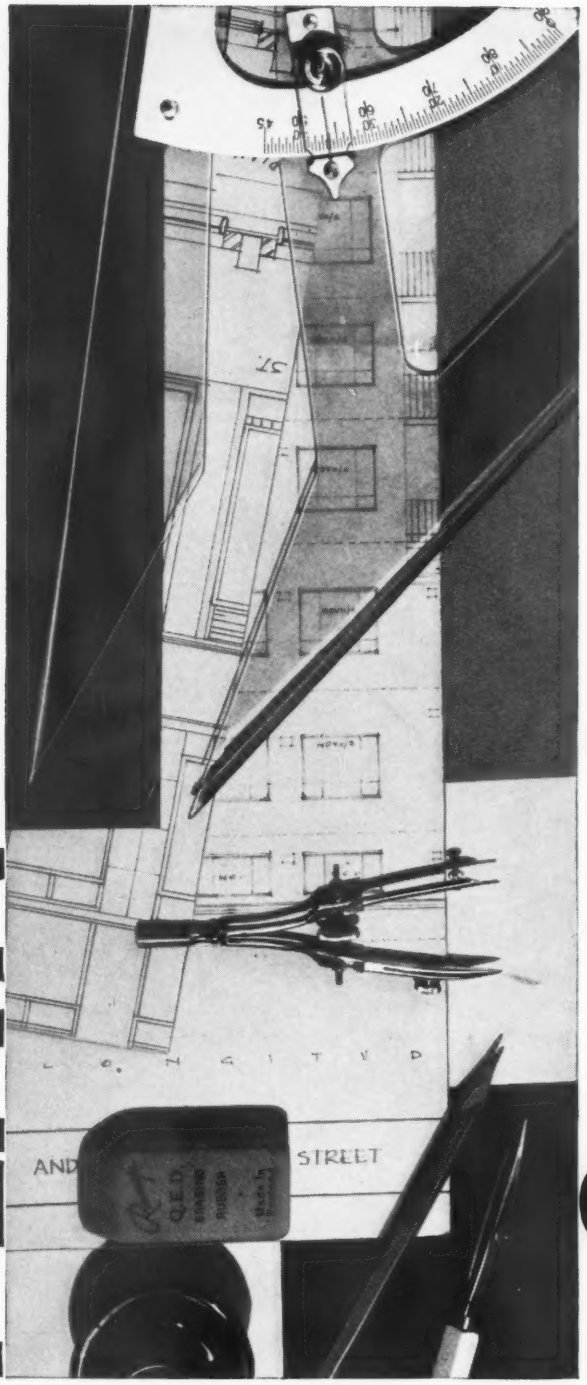

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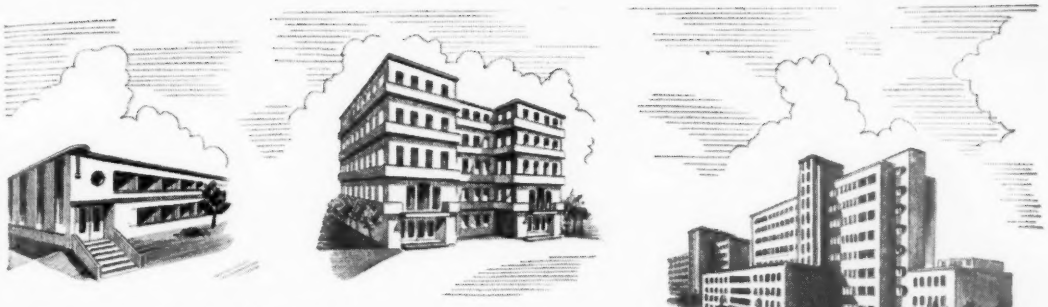

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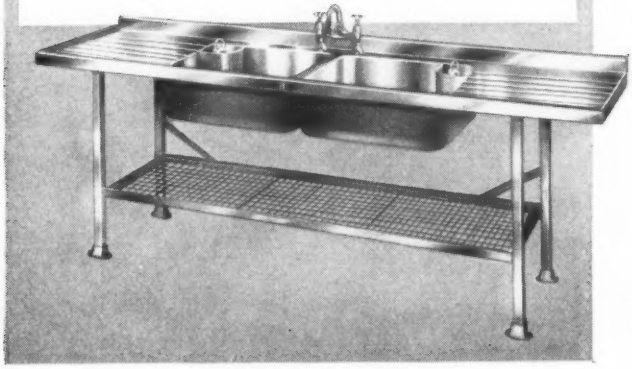
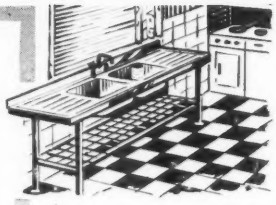
are increasingly specified





Sissons produce a standard range of heavy duty catering sinks, of which the model shown is an example. In addition, Sissons are able to produce sinks, sterilizing units and stainless steel tabling to specification, and their advice and experience is freely available at the planning stage.

Please ask for further information, or send details of your requirements, quoting reference R. 6.

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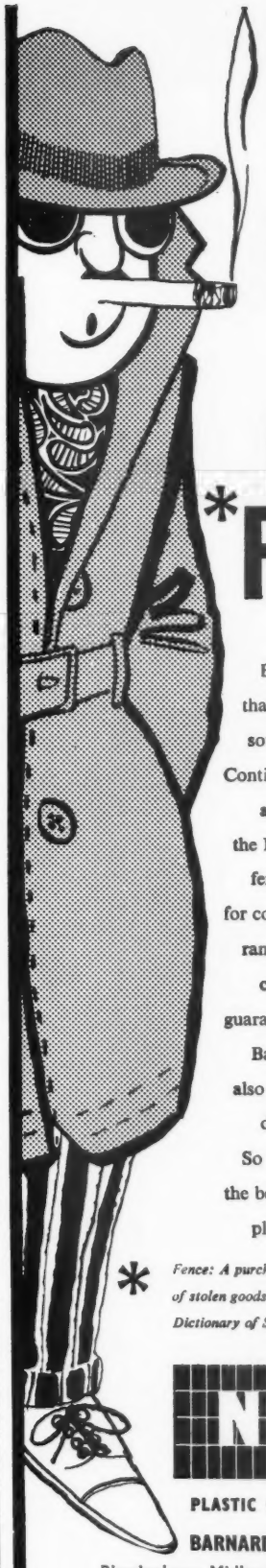

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Experienced operators know that they're a site better off with a sound, reliable and economical fence. Continuous testing and development at Barnards has now produced the Norvic plastic-covered chain-link fencing – far ahead of its rivals for consistent quality and wide colour range. And Barnards are the only company who are prepared to guarantee this fencing for fifteen years. Barnards' service organisation is also first-class and delivery is swift and dependable.

So when you need a fence, specify the best; specify Barnards' Norvic plastic-covered chain-link fencing.

* *Fence: A purchaser or receiver, and/or a storer of stolen goods.— Dictionary of Slang and Unconventional English.*

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THE PLANNED LOCKERING FOR LIGHT INDUSTRY

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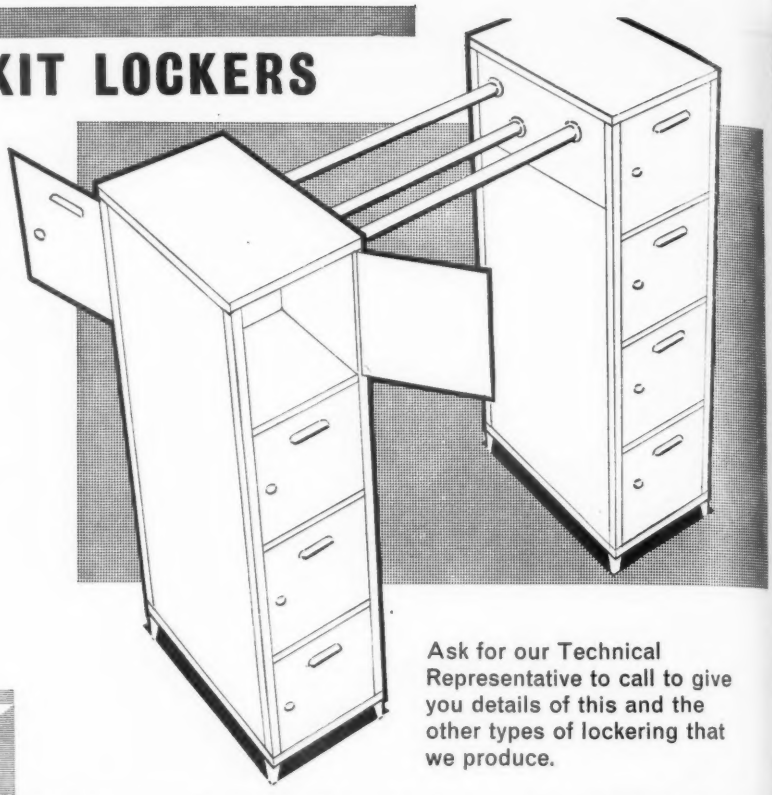
Each locker is soundly constructed in sheet steel with individual keys and locks. Suitable heating can be installed. Send for details today.



Ask for our Technical Representative to call to give you details of this and the other types of lockering that we produce.

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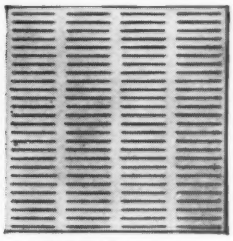
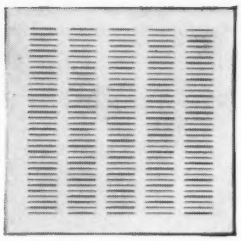
—think **weyroc**

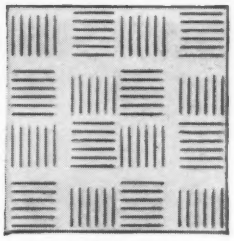
AP 14



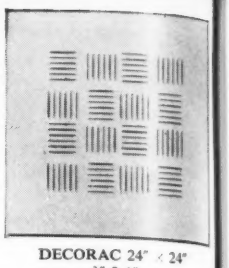
TREETAC 16″ × 16″
¾″



TREETAC 24″ × 24″
¾″

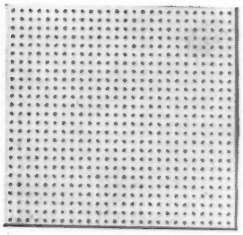


DECORAC 16″ × 16″
¾″ & 1″

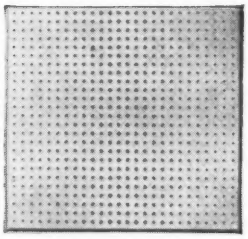


DECORAC 24″ × 24″
¾″ & 1″

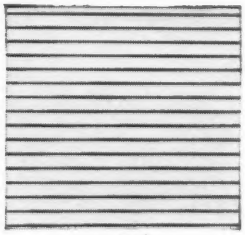
Treetex decorative



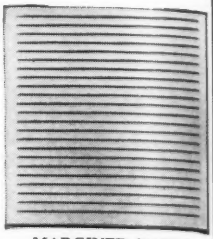
TREEPERAC
12″ × 12″; 16″ × 16″; 24″ × 24″
4′ × 8′
¾″ & 1″



TREEPERAC VP
16″ × 16″
4′ × 8′
5/8″, ¾″ & 1″

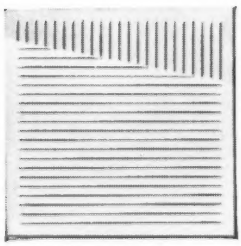


SLOTAC
16″ × 16″; 24″ × 24″
¾″ & ¾″

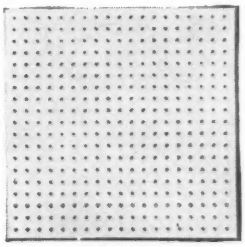


MARGINED SLOTAC
24″ × 24″
¾″

acoustic tiles and sheets



M.C-S. SLOTAC
24″ × 24″
¾″ & 1″



PERFOTEX
16″ × 16″
4′ × 8′
½″

...for interiors of distinction

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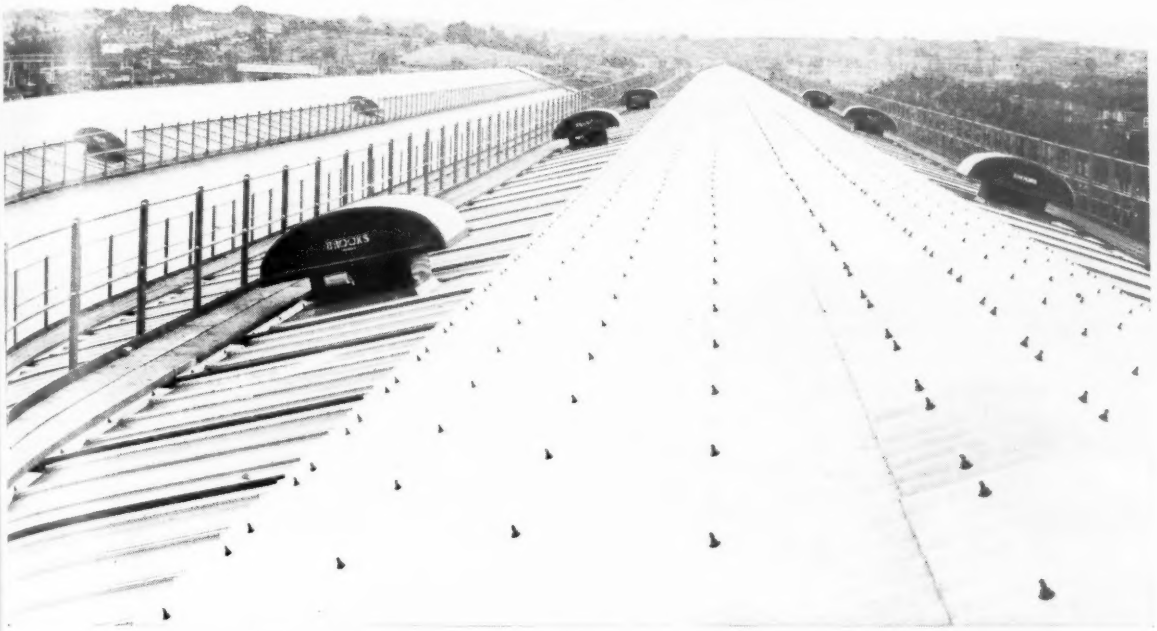

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BRITAIN'S TALL BUILDINGS

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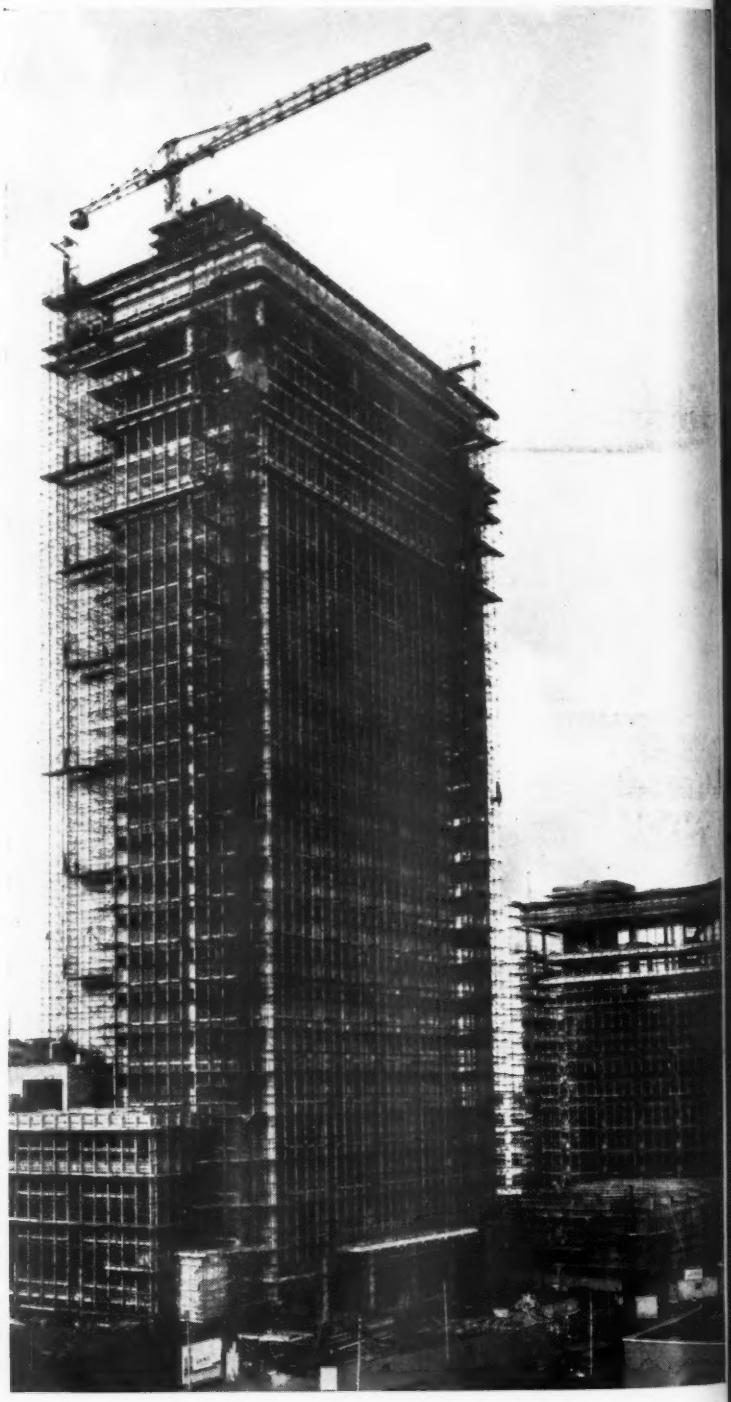
One of the country's largest office blocks, the 400 ft. high new building for the Co-operative Insurance Society Ltd, will have a floor area of over 12½ acres, incorporating three levels of basement, a five-floor podium and a 25-storey tower.
Also included in the scheme, which is due for completion in 1962, is a Conference Hall to seat 1,000 and a 14-storey tower block to be occupied by the Co-operative Wholesale Society Ltd.

Architects G. S. Hay, F.R.I.B.A. Chief Architect, Manchester, Co-operative Wholesale Society Ltd, in association with Sir John Burnet, Tait and Partners.

Engineering Services: O. Castick, A.M.I. Mech. E, Chief Engineer, Manchester, Co-operative Wholesale Society Ltd.

Structural Engineer: A. E. Beer, E.R.D, A.C.G.I, M.I.C.E, M.I. Struct. E.



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